DIRECTORS' REPORT

Our focus on the UK Corporate Governance Code 2018

Compliance with the UK Corporate Governance Code 2018

The Company is subject to the principles and provisions of the UK Corporate Governance Code 2018 (the Code), a copy of which is available at www.frc.org.uk. For the year ended 31 December 2019, the Board considers that it has complied in full with the provisions of the Code with the exception of provision 32 regarding Irene Dorner's appointment as Chairman of the Remuneration Committee. An explanation of this can be found on page 59.

Board Leadership and Company Purpose

- We believe our Board is particularly active. Our Directors' report provides examples of our leadership and engagement with our stakeholders (see page 70).
- We developed the corporate narrative during the year to further define and articulate the Group's purpose (see page 67).
- Our transformation programme is designed to ensure we have the right resources and skills to execute our strategy (see pages 45 and 67).
- Our Code and associated policies ensure our workforce can meet our expected values and behaviours. We encourage speaking up through our Ethics Line (see page 49).

Division of Responsibilities

- We clearly define the roles of the Chairman and the Chief Executive and fully support the separation of the two roles.
- The Board believes it operates effectively with the appropriate balance of independent Non-Executive Directors (NEDs) and executive directors (see pages 62 to 64).
- When considering external appointments for our NEDs, prior Board approval is required to ensure there is no compromise on time commitment (see page 77).
- Our Board evaluation highlighted the quality of the information provided to the Board (see page 74).

Composition, Succession and Evaluation

- We have a clear process when considering appointments to the Board (see page 77).
- As part of our focus on succession planning, we review the skills and attributes required.
- Our Board biographies and related charts demonstrate the skills, experience and knowledge of our Directors (see pages 62 to 64).
- In 2019, Belinda Hudson Limited carried out an annual evaluation of the Board. The methodology and progress can be found on page 74.

Remuneration

- Our remuneration policy has been revised this year and will be put to the shareholders for approval at our 2020 AGM. Key changes are set out on page 89 and clear links to our KPIs can be found on page 14.
- The Remuneration Committee, comprising only NEDs, is responsible for developing the policy and determining executive and senior management remuneration. This is discussed in the Remuneration Report on page 85.
- No Director is involved when deciding their own remuneration outcome.

Audit, Risk and Internal Control

- We recognise the importance and benefits of ensuring both the internal audit function and the external auditors remain independent. See pages 83 to 84.
- The Board presents a fair, balanced and understandable (FBU) assessment of the Company's position and prospects. To enable us to do so, the Audit Committee review the processes used to prepare and verify the FBU statement (see page 81).
- Our risk and control environment is reviewed by the Audit Committee. The Board considered both emerging and principal risks during the year (see page 68).

CHAIRMAN'S INTRODUCTION TO DIRECTORS' REPORT

SIR IAN DAVIS
Chairman

Introduction

In early 2019, we considered the key trends in UK governance and this created a background for our discussions throughout the year. We recognised the increasing emphasis on corporate purpose, culture, risk and the scrutiny of financial, audit and ethical integrity. Environmental, social and governance (ESG) issues are areas of increasing importance to investors and society. There are more calls for democratisation of companies and boards particularly through emphasis on worker engagement and transparency of everything. We have responded by clearly articulating our purpose, with supporting communications to all key stakeholders. We have reviewed our plans to manage and mitigate our risks and we have found ways of assessing and calibrating culture and behaviours, maintaining focus through a period of transformation and restructuring. We have also spent time ensuring that our accountabilities and expectations are clearly articulated internally under our 'freedom within a framework' concept (see page 61).

Diversity & inclusion (D&I) remain a priority. We have high ambitions but also clear targets which are tracked by the Board to ensure they are achieved. Each member of the Executive Team has personal accountability for diversity in their own area. The Board is temporarily not meeting our stated Board diversity policy objective but we have a very clear aim to rectify this.

We remain a particularly active Board. We seek opportunities outside the boardroom to find out what is happening across the organisation and gain assurance that the Group is operating responsibly and effectively. You will see examples of this as you read through the Directors' Report.

Corporate culture

We continue to create a working environment where every employee at Rolls-Royce is able to be at their best. As a Board, we take every opportunity to assess progress and impacts on culture and behaviour. This has included how we look at talent and succession (see page 77), governance initiatives (page 78), diversity and inclusion, employee engagement and our career framework (pages 67 and 71) in the Directors' Report and the People and Culture report on page 45.

We rolled out anti-bullying and harassment training across the Group in reaction to a trend that was beginning to emerge from feedback to our Ethics Line in 2018 (see page 49).

Lord Gold presented his final report to the Serious Fraud Office in August 2019, in which he noted the exemplary progress made in improving the Company's approach to ethics and anti-bribery and corruption compliance. This concludes Lord Gold's work with us and I would like to thank him for his diligence and commitment which has helped us shape our ethics and compliance programmes. We are committed to continuing our communication and training to employees as well as our monitoring and assurance work.

This means that all our employees are enabled to act with integrity and are able to speak up via our Ethics Line and to call on the support of their local ethics advisers. The Board reviewed the speak-up cases reported through the Ethics Line twice during the year. These are the subject of prior review by the Safety, Ethics & Sustainability Committee, who support the Board in our deliberations in this area. You can read more about this on pages 67 and 110.

HSE, occupational safety and wellbeing remain priorities for the Group. Whist there was improvement in some areas of the business, we were disappointed that the overall total reportable injury (TRI) rate remained flat year-on-year. This will be an area of particular focus in 2020.

Product safety has been an important issue for our industry this year. We have focused on our product safety training and on how safety risk is managed through a time of transformation. We continue to pursue our goal of continuous product safety improvement – this is fundamental to our licence to operate and to the sustainability of our business.

For more information on D&I and employee engagement see People and Culture on page 45.

Board developments

We are very sorry that Ruth Cairnie stepped down from the Board at the end of 2019 to allow her more time to focus on her other commitments, following her appointment as chair of Babcock International Group PLC. Following Ruth's departure, Irene Dorner was appointed as Chairman of the Remuneration Committee, with effect from 1 January 2020. While we note the Code requirement that remuneration committee chairs should have served on a remuneration committee for at least 12 months prior to their appointment, we have every confidence that Irene has the appropriate experience and skills to carry out the role. She formally joined the Remuneration Committee on 1 August 2019. Irene is Employee Champion on the Board, a role she has held for three years. Her role on the Audit Committee over the last four years gives her excellent insights into the financial performance measures and targets for the long and short-term incentive schemes. She has also attended six Remuneration Committee meetings since joining the Board and is therefore familiar with the discussions and workings of the Committee. Irene also has experience of HR in her executive career having spent two years as general manager, human resources for a UK unionised workforce of 55,000 at HSBC. Irene joined Ruth to consult with shareholders on the remuneration policy that will be voted on by shareholders at the 2020 AGM and both attended the joint briefing during the year on wider workforce engagement (see page 86). Irene stepped down from the Audit Committee in December 2019.

Ruth's unexpected departure from the Board temporarily left us short of our own Board diversity targets. However, I am pleased that we have recently announced the appointment of Dame Angela Strank, currently chief scientist and head of downstream technology at BP and a member of their executive management team. Dame Angela will join our Board on 1 May 2020.

Brad Singer also stepped down from the Board in December 2019. As a partner and chief operating officer of ValueAct Capital, he offered a valued external perspective during his time as a Director.

We have continued to push for increased financial and accounting transparency and the reports that follow demonstrate this. We have enhanced our Board expertise on finance and accounting with the appointment of George Culmer in January 2020.

Nick Luff will take over as Chairman of the Audit Committee following the 2020 AGM The Audit Committee looks at our principal risk regarding cyber threat and has formed a sub-committee focused on data security, on which both Nick and George sit. The sub-committee met for the first time in January 2020 and the Audit Committee look forward to hearing their insights during the course of the coming year.

We have decided to retain both Lewis Booth and Sir Frank Chapman for a further period. This is discussed on page 77.

ESG

We have raised the profile of environmental and sustainability issues and aligned the transparency on these issues across the Safety, Ethics & Sustainability Committee and the Science & Technology Committee, as we said we would do last year. We also held our first ESG event in April with investors, on which you can read more on page 78. Sir Frank Chapman and I also attended executive-level committee meetings on the environment and sustainability, enabling us to gain deeper insights while visibly supporting management's goals in these areas. Our purpose clearly reflects the important role we play in society with pioneering sustainable power (see page 10).

Governance

While the Directors have always engaged with and had the best interests of all our stakeholders at the centre of our discussions, the revisions to the Code in 2018 have brought the reporting into more focus and our activities as a Board are reported on page 67. In addition, each of our Non-Executive Directors does much to contribute and represent Rolls-Royce as they go around the world.

We have continued with our governance agenda and gave particular focus in 2019 to our internal governance, developing and articulating our freedom within a framework concept. This defines the framework in which the businesses have the maximum freedom, responsibility and accountability for their performance. Within this are a set of core non-negotiables including common safety standards, Our Code and mandatory Group policies as well as our common approach to talent and performance management and processes, reward and career development. A key element of our transformation programme has been the simplification of the Rolls-Royce management system and the Board's focus has been to ensure that the key principles which keep our products safe are retained.

The framework supports the management focus on culture and behaviours by reinforcing the need for simplification and stripping out unnecessary duplication and bureaucracy, making accountabilities and expectations clear. You can read more about our framework on pages 61 and 78.

Looking forward

We will continue to focus on culture and behaviour as we look to stabilise the operational performance of the business and our cost base. While we pride ourselves on innovative governance, what drives us is the need for governance to fit the needs of the business and to ensure we add value in all that we do. We will continue to do this throughout 2020.

Sir Ian Davis
Chairman

FREEDOM WITHIN A FRAMEWORK

The Executive Team has defined the framework in which the Businesses have the maximum freedom, responsibility and accountability for their performance.

The framework sets out how we are organised as a Group. Having the framework in place enables us to manage risk, drive critical business decisions and maintain standards across the Group. It means we can act with pace and confidence in a way that meets the expectations of our stakeholders.

The framework sets out the roles of the businesses, the Head Office, Group Businesses Services and the Innovation Hub and defines what we mean by empowered businesses.

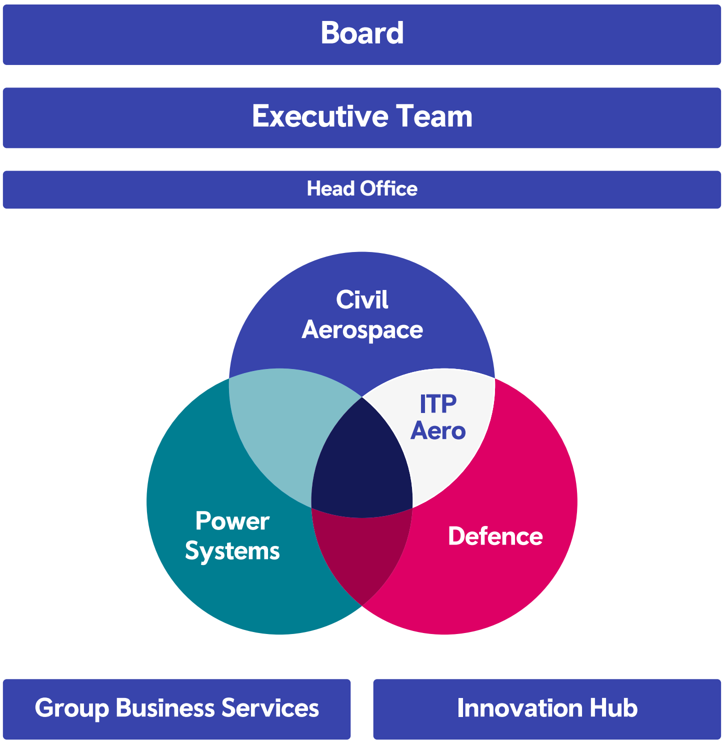
Our people section sets out the capabilities, behaviours, competencies and values which enable us to deliver our strategy.

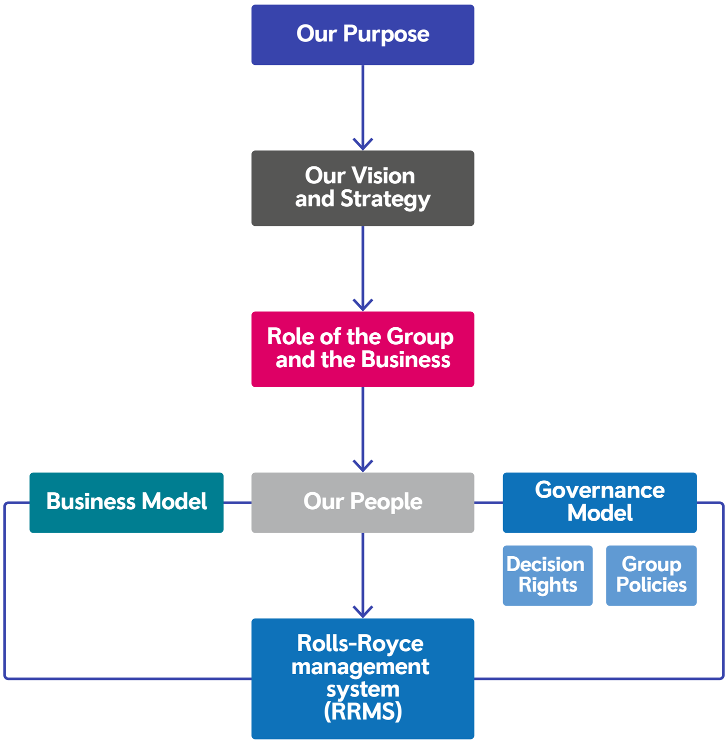
The governance model clarifies decision-making rights and points of accountability and includes a tool for all key decision-makers to access, to support them in their decision-making. It includes details of all governance bodies and decision-making committees within the Group that they may need to consult or seek approval from. It also provides access and an overview of our mandatory Group policies which define the requirements for all our people when they are carrying out their day-to-day activities, and sets out our risk management and internal control systems and assurance activities.

The Rolls-Royce management system (RRMS) promotes end-to-end value stream processes that standardise and simplify the way we deliver products and services across the Group – and it is an important strand in our governance of product safety.

Together, these are set within the context of our vision and strategy and also link to our business model. All our people can see how everything joins together and how they are contributing to one of the world's leading industrial technology companies, connecting, powering and protecting society.

You can read more about our framework on pages 60 and 78.





BOARD OF DIRECTORS

1. SIR IAN DAVIS
NG

Chairman of the Board
Chairman, Nominations & Governance Committee

Appointed to the Board in March 2013 and as Chairman in May 2013.

Career Sir Ian was a partner at McKinsey for 31 years and, during his time, served as chairman and worldwide managing director. Sir Ian was knighted in 2019 for services to business.

Board skills and experience Sir Ian brings significant financial and strategic experience and has worked with and advised global organisations and companies. This enables him to draw on knowledge of diverse issues and outcomes to assist the Board.

Other principal roles BP p.l.c., senior independent director; Johnson & Johnson Inc., non-executive director; McKinsey & Company, senior partner emeritus

2. WARREN EAST CBE
Chief Executive

Appointed to the Board in January 2014 and as Chief Executive in July 2015.

Career Warren is an engineer and joined ARM Holdings plc in 1994 where he was CEO from 2001 until 2013. He is a fellow of the Institute of Engineering and Technology; the Royal Academy of Engineering; the Royal Society; and the Royal Aeronautical Society. He was awarded a CBE in 2014 for services to the technology industry.

Board skills and experience Warren brings a deep understanding of technology and developing long-term partnerships. He also has proven strategic and leadership skills within a global business and a strong record of value creation.

Other principal roles ASML Holdings NV, member of the supervisory board (with effect from 22 April 2020)

3. STEPHEN DAINTITH
Chief Financial Officer

Appointed in April 2017.

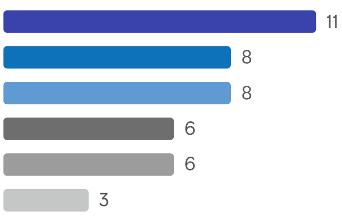
Career Stephen is a chartered accountant. His previous roles include CFO of Daily Mail and General Trust plc from 2011 to 2017. He was CFO and COO of Dow Jones in New York and CFO of News International in London, both part of News Corporation. Prior to this, he held executive positions at British American Tobacco p.l.c.

Board skills and experience Stephen has a strong understanding of international business and an appreciation for looking beyond numbers to help improve performance. His change management experience allows him to make a significant contribution to the long-term growth of the business.

Other principal roles 3i Group plc, non-executive director

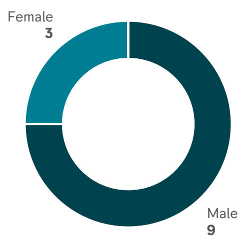
Composition of the Board (at 28 February 2020)

Board skills and experience

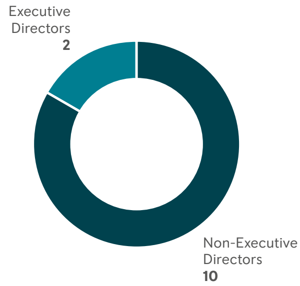


Number of Directors with:
- Chairman/CEO/CFO experience
- Related industry/operational
- Financial
- Engineering/technology
- Safety/regulatory/risk
- Remuneration/HR

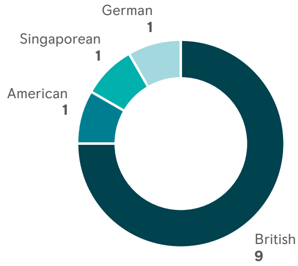
Board members by gender



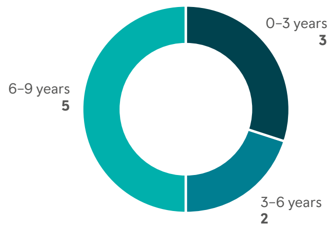
Balance of the Board



Board members by nationality *



Non-Executive Directors' tenure



* According to the Company's Articles, at least 50% of our Directors must be British citizens.






4. LEWIS BOOTH CBE
NG A R

Independent Non-Executive Director
Chairman, Audit Committee

Appointed in May 2011.

Career After gaining a bachelor of engineering degree with honours in mechanical engineering, Lewis began his career with British Leyland. He spent 34 years at Ford Motor Company including as executive vice president and CFO. He was awarded a CBE in 2012 for services to the UK automotive and manufacturing industries.

Board skills and experience Lewis has considerable financial expertise and experience, of great benefit to both the Board and in his role as Chairman of the Audit Committee. He brings a global perspective and is recognised as one of the strongest and most experienced international leaders in his sector.

Other principal roles Mondelez International Inc., director

5. SIR FRANK CHAPMAN
NG SES ST

Independent Non-Executive Director
Chairman, Safety, Ethics & Sustainability Committee

Appointed in November 2011.

Career Sir Frank is a chartered engineer. With more than 40 years spent in the oil & gas sector, he was chief executive of BG Group plc for 12 years and chairman of Golar LNG Limited. He is a fellow of the Royal Academy of Engineering, the Institute of Mechanical Engineers and the Energy Institute. He was knighted in 2011 for services to the oil & gas industry.

Board skills and experience Sir Frank has an outstanding record of business achievement, a life-long passion for engineering and innovation and a deep understanding of technology. His significant industrial and safety experience are invaluable to the Board and its committees.

Other principal roles NextDecade Corporation, non-executive director; Myeloma UK, vice chairman

6. GEORGE CULMER
NG A SES

Independent Non-Executive Director

Appointed in January 2020.

Career George is a chartered accountant. Having started his career with Coopers & Lybrand, he has held senior financial positions with Prudential, Zurich Financial Services and RSA Insurance Group where he was chief financial officer. Until August 2019, George was CFO at Lloyds Banking Group, a position he held for 7 years.

Board skills and experience George has significant experience gained in large, international, highly regulated groups and has proven business leadership credentials. Together with this, he brings to the Board and its committees change leadership and transformation experience gained from within complex groups.

Other principal roles Aviva plc, senior independent non-executive director

7. IRENE DORNER
NG R SES

Independent Non-Executive Director
Chairman, Remuneration Committee
Employee Champion

Appointed in July 2015.

Career Irene was CEO and president of HSBC, US until retiring in 2014. During her 30-year career with HSBC, she held a number of international roles including CEO of HSBC in Malaysia. Irene is an honorary fellow of St Anne's College Oxford. She qualified as a barrister-at-law in London and from 2015 to 2016, was a consultant at PwC.

Board skills and experience With a strong background in risk management, gained from the financial sector, Irene brings valuable insight as part of her role on our Board committees. As a passionate advocate of diversity & inclusion, she has embraced the role of Employee Champion and ensures the views of the workforce are properly reflected in the Board's discussions.

Other principal roles Taylor Wimpey, chair; AXA SA, director; Control Risks Group, chair

8. BEVERLY GOULET
NG A R

Independent Non-Executive Director
Employee Champion, North America

Appointed in July 2017.

Career Beverly, a US national, started her career as a securities and M&A lawyer and has spent a considerable amount of her career in the airline industry. From 1993, Beverly was a key member of the executive team of American Airlines where she served in a number of senior roles.

Board skills and experience Beverly brings valuable knowledge and operational experience gained from within the airline sector. Together with her expertise in finance, treasury, strategy, legal and governance matters, she actively takes part in the development and strengthening of our business.

Other principal roles Xenia Hotels and Resorts Inc., non-executive director; Texas Women's Foundation, board member; American Airlines Federal Credit Union, board chair; Rolls-Royce North America Holdings, Inc., board member

9. LEE HSIEN YANG
NG A SES

Independent Non-Executive Director

Appointed in January 2014.

Career A Singaporean, Hsien Yang was chief executive of Singapore Telecommunications Limited for 12 years. He was a former member of the Rolls-Royce International Advisory Board, he served as chairman and non-executive director of Fraser and Neave Limited from 2007 to 2013 and Chairman of the Civil Aviation Authority of Singapore.

Board skills and experience Hsien Yang combines a strong background in engineering with extensive international business and management experience in a key market for the Company. His significant industrial and financial skills prove valuable in his committee memberships.

Other principal roles INSEAD South East Asia Council, president


10


11


12


13


14

Key

- NG Nominations & Governance Committee
- A Audit Committee
- R Remuneration Committee
- SES Safety, Ethics & Sustainability Committee
- ST Science & Technology Committee

10. NICK LUFF NG A SES

Independent Non-Executive Director

Appointed in May 2018.

Career Nick is a chartered accountant. He is chief financial officer of RELX plc, playing a key role in driving shareholder returns as the company transforms its business and simplifies its corporate structure. Nick was previously CFO of Centrica plc for seven years and, prior to that, P&O Group. Nick has formerly been audit committee chairman and a non-executive director of both Lloyds Banking Group plc and QinetiQ Group plc.

Boards skills and experience Nick has broad financial skills and a track record of driving business performance. In addition, he has extensive non-executive experience. This exposure together with both financial and accounting expertise and a passion for engineering is invaluable to the Board.

Other principal roles RELX plc, chief financial officer

11. SIR KEVIN SMITH CBE NG R ST

Senior Independent Director
Chairman, Science & Technology Committee

Appointed in November 2015.

Career Sir Kevin was group chief executive of GKN plc for nine years. Before GKN, he spent nearly 20 years with BAE Systems in a number of senior executive positions. He has an honorary fellowship doctorate from Cranfield University and is an honorary fellow of the University of Central Lancashire. He was awarded a CBE in 1997 and knighted in 2006 for services to industry.

Board skills and experience Sir Kevin has extensive industrial leadership experience and a deep knowledge of engineering and manufacturing businesses, as well as the aerospace industry. He makes a significant contribution to the growth and development of our key strategies, both as a member of the Board and as Chairman of the Science & Technology Committee.

Other principal roles L.E.K. Consulting, European advisory board member

12. PAMELA COLES

Company Secretary
Chief Governance Officer

Appointed in October 2014.

Career Pamela is a fellow of The Chartered Governance Institute. She joined Rolls-Royce from Centrica plc, where she was head of secretariat. Pamela's previous roles also include group company secretary and a member of the executive committee at The Rank Group plc and company secretary and head of legal at RAC plc.

Skills and experience Pamela is an expert in corporate governance and company law. With a pragmatic approach to how the Governance Team supports the business, she has been instrumental in supporting the Chairman and the Non-Executive Directors to build strong relationships with the management team and has been able to offer advice and guidance on a wide range of topics.

Other principal roles E-ACT, non-executive director

13. JASMIN STAIBLIN NG ST

Independent Non-Executive Director

Appointed in May 2012.

Career A German national, Jasmin was the CEO of Alpiq Holding AG from 2013 to 2018. Prior to this, she held a number of senior positions in the ABB Group working in Switzerland, Sweden and Australia, becoming CEO of ABB Switzerland from 2006 until 2012.

Board skills and experience Jasmin combines a strong background in advanced engineering and deep technology knowledge with extensive international business experience in the industrial sector. With a background dominated by science and technology, she makes a significant contribution both to the Board and as a member of the Science & Technology Committee.

Other principal roles Zurich Insurance Group, non-executive director; NXP Semiconductors N.V., non-executive director; Georg Fischer AG, non-executive director

14. DAME ANGELA STRANK NG SES ST

Independent Non-Executive Director

To join the Board in May 2020.

Career Dame Angela is a chartered engineer and is currently chief scientist and head of downstream technology at BP and a member of their executive management team. She joined BP in 1982 and has held a number of senior executive roles. She is a fellow of the UK Energy Institute, the Institute of Chemical Engineers, the Royal Academy of Engineers and the Royal Society. Dame Angela received a DBE in 2017 for services to the oil & gas industry and for encouraging women into STEM careers.

Skills and experience Dame Angela brings a proven track record in managing engineering operations and technology and digital research and development programmes. She is a recognised role model for women in both the energy industry and STEM careers in business and industry.

Other principal roles Severn Trent plc, non-executive director

Board committee membership *

	NG	A	R	SES	ST
Sir Ian Davis	C				
Lewis Booth	■	C	■		
Sir Frank Chapman	■			C	■
George Culmer	■	■		■	
Irene Dorner	■		C	■	
Beverly Goulet	■	■	■		
Lee Hsien Yang	■	■		■	
Nick Luff	■	■		■	
Sir Kevin Smith	■		■		C
Jasmin Staiblin	■				■

C Chairman
* at 28 February 2020

Full Directors' biographies can be found at www.rolls-royce.com

CORPORATE GOVERNANCE

The Board

The role of the Board

The Board is ultimately responsible to shareholders for the direction, management, performance and long-term sustainable success of the Company. It sets the Group's strategy and objectives and oversees and monitors internal controls, risk management, principal risks, governance and viability of the Company. In doing so, the Directors comply with their duties under section 172 of the Companies Act 2006 (see page 56).

The Board has established certain principal committees to assist it in fulfilling its oversight responsibilities, providing dedicated focus on particular areas, as set out below. Each committee chairman reports to the Board on the committee's activities after each meeting.

In addition to the Board's principal committees, it has established a sub-committee of Directors who each hold an appropriate level of UK national security clearance for the purpose of receiving and considering, on behalf of the Board, any UK classified information relating to the Group's programmes and activities. Beverly Goulet, a US national and independent Non-Executive Director, also sits on the board of Rolls-Royce North America Holdings, Inc. to create a link between the Board and the Group's North American governance structure.

Key matters reserved to the Board

- The Group's long-term objectives, strategy and risk appetite
- The Group's organisation and capability
- Stakeholder engagement
- Overall corporate governance arrangements including Board and committee composition, committee terms of reference, Directors' independence and conflicts of interest
- Internal controls, governance and risk management frameworks
- Changes to the corporate or capital structure of the Company
- Annual Report and financial and regulatory announcements
- Significant changes in accounting policies or practices
- Annual budgets and financial expenditure and commitments above levels set by the Board
- Overview of speak up cases reported through the Ethics Line

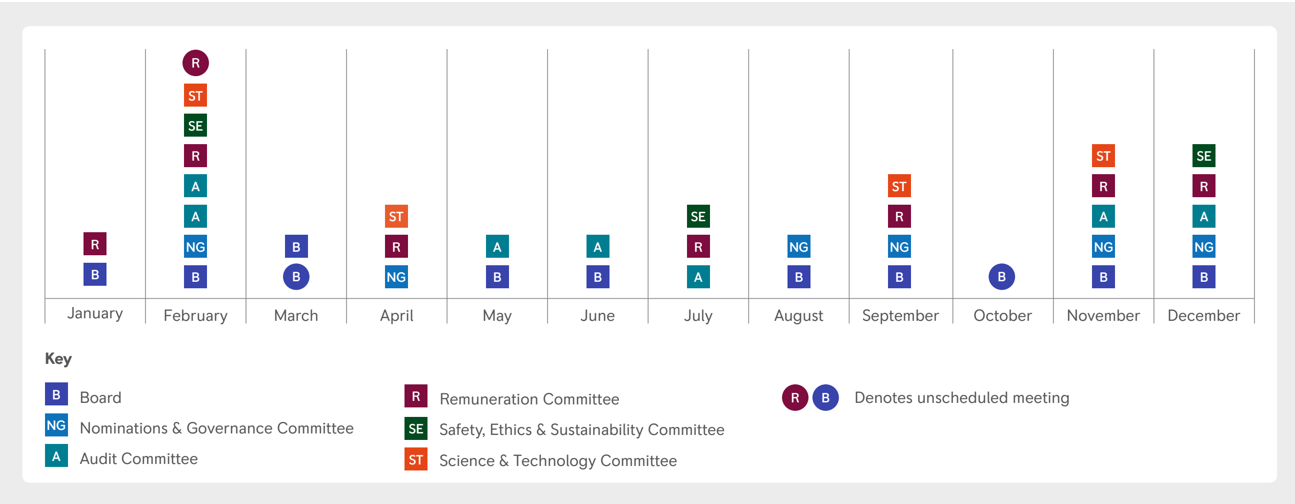
The Board committees

Nominations & Governance Committee	Audit Committee	Remuneration Committee	Safety, Ethics & Sustainability Committee	Science & Technology Committee
Board and committee composition	Financial reporting	Remuneration policy	Product safety	Technology strategy
Board nominations	Internal controls and risk management	Incentive design and setting of targets	HSE	Cross-sector technology
Succession planning for Directors and senior management	Internal audit	Executive and senior management remuneration review	Sustainability	Technology capabilities and skills
Corporate governance	External audit	Workforce remuneration review and related policies	Ethics and compliance	Technology trends and risks
Oversight of principal risk – talent and capability	Oversight of principal risks – business continuity, market and financial shock, cyber threat		Oversight of principal risks – safety, compliance, climate change, strategic transformation	

Roles and responsibilities

The roles of the Chairman and Chief Executive are clearly defined and the Board supports the separation of the two roles. The Chairman is responsible for the leadership and effectiveness of the Board. The Chief Executive is responsible for the running of the Group's business and leads the Executive Team which comes together to communicate, review and agree on issues and actions of Group-wide significance. Non-Executive Directors support the Chairman and provide objective and constructive challenge to management. The Senior Independent Director (SID) provides a sounding board for the Chairman and serves as an intermediary for the Chief Executive, other Directors and shareholders when required. The Company Secretary makes sure that appropriate and timely information is provided to the Board and its committees and is responsible for advising and supporting the Chairman and Board on all governance matters. All Directors have access to the Company Secretary and may take independent professional advice at the Company's expense in conducting their duties.

Board and committee meetings held in 2019



At the end of most scheduled meetings, the Chairman holds meetings with the Non-Executive Directors without the Executive Directors or management present.

Two additional scheduled meetings of the Audit Committee were added to the 2019 calendar, one additional meeting ahead of both the 2018 preliminary and 2019 interim results, to ensure the Committee was appropriately briefed ahead of time.

The Board held an unscheduled meeting in March to review the future opportunities for ITP Aero and in October to follow up on discussions raised at the meeting in September.

The Remuneration Committee also held an unscheduled meeting in February to follow up on discussions at the January meeting regarding executive reward.

Non-attendance

Board members are sometimes unable to participate in certain Board and committee meetings due to other business commitments. For 2019, attendance was 100% for all directors. However, if any Directors were unable to attend a meeting, they would communicate their opinions and comments on the matters to be considered via the Chairman of the Board or the relevant committee chairman.

Board and committee members and attendance at scheduled meetings in 2019

	Board (9 meetings)	Nominations & Governance (6 meetings)	Audit (7 meetings)	Remuneration (7 meetings)	Safety, Ethics & Sustainability (3 meetings)	Science & Technology (4 meetings)
Sir Ian Davis	9/9	6/6				
Warren East	9/9					
Stephen Daintith	9/9					
Lewis Booth	9/9	6/6	7/7	7/7		
Ruth Cairnie (stepped down 31 December 2019)	9/9	6/6		7/7		4/4
Sir Frank Chapman	9/9	6/6			3/3	4/4
Irene Dorner	9/9	6/6	7/7	3/3[1]	3/3	
Beverly Goulet	9/9	6/6	7/7	7/7		
Lee Hsien Yang	9/9	6/6	7/7		3/3	
Nick Luff	9/9	6/6	7/7		3/3	
Brad Singer (stepped down 9 December 2019)	8/8					4/4
Sir Kevin Smith	9/9	6/6		7/7		4/4
Jasmin Staiblin	9/9	6/6				4/4

[1] Irene Dorner was appointed to the Remuneration Committee in August 2019. She stepped down from the Audit Committee at the end of 2019.

Board's focus during the year

Area of focus	Key matters considered	Outcome
Group purpose	Corporate narrative	During the year, the Executive Team developed the corporate narrative to further define and articulate the Group's purpose – to connect, power and protect society (see page 10). The corporate narrative aligned with the Group's vision and strategy and with the Board's engagement and focus on ESG issues, as demonstrated through the ESG shareholder event (see page 78).
Strategy	Review of the Group's strategy and acquisition of Siemens' eAircraft business	The Board received regular updates on strategy throughout the year and, in September, held a two-day meeting with the Executive Team focused on operational and financial progress against the Group's short and long-term plans. The Board received detailed updates on progress with the execution of the transformation programme, particularly with the simplification initiatives, cost reduction, skills alignment to future requirements and the cultural agenda. In May, the Board held its meetings in Bristol, UK at our main UK-based Defence site and received an update on the Defence business strategy. At that meeting, the Board also received an update on the Group's Services strategy across both the Defence and Civil Aerospace businesses. The agreement to acquire Siemens' eAircraft business in June accelerated the delivery of the Group's electrification strategy.
	Withdrawal from engine competition for new midsize airplane platform (NMA)	In February, the Board confirmed the decision to withdraw from the competition to power Boeing's proposed middle of the market, or NMA, platform. We were unable to commit to the proposed timetable to ensure we had a sufficiently mature product which would support Boeing's ambition for the aircraft and which would satisfy our own internal requirements for technical maturity at entry into service. The Board agreed it was important to deliver on the current engine programmes and focus on the development of new technologies such as our next generation UltraFan.
Culture	Review of the culture change agenda	The transformation programme has a cultural change agenda at its core and the Board has sought ways to track progress and seek feedback on how the behaviours articulated in the people framework (see page 45) are embedding. This included: — presentations from the Group People Director on diversity & inclusion, talent and succession and the leadership learning, performance management and career frameworks; — feedback from the Employee Champions, much of which was focused on simplification and leadership of culture change; — progress report on the anti-bullying and harassment campaign and training (see page 49); — updates on engagement with the UK Trade Unions and European Works Council and their reactions to restructuring proposals; — delivery of the safety agenda; — noting of Lord Gold's final report on the Group's approach to ethics and anti-bribery and corruption (see page 109); — progress report on the simplification processes (for example, RRMS, finance transformation, Civil Aerospace transformation); — reviews from the Ethics Line; — outcome from the employee surveys; — feedback from the 'let's talk' engagement sessions led by the Executive Team (see page 46); and — interaction from the Meet the Board, site visits and other engagement sessions (see page 71).
	UK pensions	The Board considered the transfer of certain pension risk liabilities to Legal & General Assurance Society Ltd by the Group's UK pension trustees which would reduce the Group's post-retirement obligations by around £4.1bn (see page 47). In order to complete the transaction, which the Board agreed was in the best interests of former and current employees, as well as for the financial strength of the Group, the Board agreed to make an exceptional cash contribution of around £30m. The Board also noted the changes to the defined benefit pension scheme for UK managers. More details of this review can also be found on page 47. The Board also considered issues that were raised in respect of this review through the Ethics Line (see page 110).

Area of focus	Key matters considered	Outcome
Risk	Review of risk appetite and principal risks, with a focus on major product programme delivery. During the year the Board: — reviewed emerging and principal risks — added climate change as a stand-alone principal risk — set up a Board-level data security committee	The Board reviewed and approved the effectiveness of the Group's risk management system and carried out a robust assessment of the principal risks facing the Company, set out on pages 50 to 54, including those that would threaten its business model, future performance, solvency or liquidity. The Board received an update on the effectiveness of risk management from the Audit Committee in December and agreed with the inclusion of the risk of climate change to future revenue growth as an additional principal risk. The implications of Brexit were kept under review throughout the year. For more information on our approach to emerging risks, including Brexit, see page 50. The Trent 1000 programme was the subject of discussion at each Board meeting throughout the year and the risks to the programme and impact on customers were considered at each meeting. The Board completed a robust assessment of the Company's emerging and principal risks (see page 50). It was agreed that it was appropriate to elevate the executive committee looking at data security to a Board-level committee, and this committee, which is a sub-committee of the Audit Committee, held its first meeting in January 2020.
Operational performance/ challenges	Civil Aerospace operational delivery programme ramp-up	The Business President for Civil Aerospace attended each Board meeting to provide a business review including progress against key operational milestones. The operations director attended the September meeting to present an in-depth review of the operations improvement programmes.
	Civil Aerospace programme challenges	The Board maintained a strong focus on the operational and technical challenges within the Trent 1000 fleet and worked closely with the Civil Aerospace team to develop a dashboard of key metrics for review at each Board meeting. A detailed technical update was presented by the engineering & technology director in December.
Financial Performance	Balance sheet review	The Board has been focusing on strengthening the balance sheet, retaining the proceeds from the sale of Commercial Marine and Power Developments; and also from two further small disposals (see page 16) and on improving the quality and sustainability of our cash flow, keeping a close watch on our credit ratings.
	Payment to shareholders	The Board is not proposing an increase in the final dividend payment for 2019. This will be held flat at 7.1p per share and brings the full payment for the year to 11.7p per share.
	Capital allocation	The Board also reviewed and agreed its approach and overview of capital allocation which had been refined as part of the governance model.
	Introduction of new accounting standard IFRS 16	The Board was assured that the judgements and estimates made in preparation for the financial statements were consistent with the new requirements.
	Finance transformation	Updates were received on progress with: the drive to transform and simplify the reporting and forecasting processes; and the introduction of Group Business Services, the new shared services environment that went live from January 2019.
Governance	Stakeholder engagement and governance	The Board considered how it engaged with all its stakeholders and continued with its own programmes, such as the ESG shareholder event, Meet the Board, Employee Champion schedules and individual Non-Executive Director site visits and town hall meetings. Details can be found in our s172 statement on page 56 and our stakeholder engagement report on pages 70 to 72. The Board also reviewed investor feedback following our full and half-year financial results, feedback from the Ethics Line in August and December, payment practices for the Group's subsidiaries, gender pay gap reporting and the Group's modern slavery statement.
	Non-financial controls	The Board considered an updated framework, including core decision rights and the simplification of the RRMS – articulating our freedom within a framework culture (see page 61).

Area of focus	Key matters considered	Outcome
Succession and leadership	Succession planning	During the course of the year, the Board considered the principal risk relating to talent and capability and reviewed succession at the most senior levels of the business (see page 77).
	Effectiveness of the Board, Chairman and Chief Executive	A light touch external evaluation was undertaken, following on from the comprehensive evaluation in 2018, and it concluded that the Board continued to operate effectively in 2019 (see page 74). The Chairman and Chief Executive received constructive feedback on their respective performance.

The Board's area of focus in 2020 are expected to include:

- continued monitoring of financial and operational performance
- the safety agenda
- the Group's culture through continued transformation
- execution of strategic priorities
- principal risk reviews

Our Board apprentice programme defined

You can read more about our Board apprentice programme on pages 71 and 77.

Participant programme induction

Board member briefing

Assigned to core committee

- Audit Committee
- Safety, Ethics & Sustainability
- Science & Technology

Supplementary rotations

- Remuneration Committee
- Employee Stakeholder Committee
- Data Security Committee
- Environment & Sustainability Committee

Additional elements

Two Board mentors and Executive Team sponsor

AGM and Meet the Board event

Masterclasses and networking opportunities

Stakeholder engagement

At Rolls-Royce, we understand that who we are and how we behave matters not only to our people but to the many stakeholders who have an interest in our business. We believe that stakeholder engagement remains vital to building a sustainable business and we interact with many stakeholders at different levels of the organisation. Engagement is carried out by those most relevant to the stakeholder group or issue.

The table below identifies some of our stakeholders and how both the Company and the Board engage with them. More details can be found on www.rolls-royce.com. The Board considers the different stakeholder groups and our engagement programmes and identifies opportunities for strengthening both its relationships and understanding to facilitate the decisions and contributions made by the Board to the success of the business.

Customers	The Board recognises that the quality of the Group's customer relationships is based on mutual trust as well as its engineering expertise. In April, Sir Ian Davis and Lee Hsien Yang travelled to China for meetings with customers, both existing and prospective. In October, Sir Frank Chapman and Irene Dorner met with customers during their visit to Singapore. Sir Ian Davis also met with Airbus in both November and January 2020 to support the Executive Team in their dialogue with them. The sale of the Group's Commercial Marine business to KONGSBERG, completed on 1 April 2019, and the importance of maintaining strong relationships with them was noted and discussed by the Board as KONGSBERG became the largest customer of the Power Systems business. The Board regularly receives operational updates, including customer metrics and feedback, from each of the businesses at every meeting with the Business Presidents regularly presenting to the Board. During the operational challenges experienced by our affected airline customers as a result of the in-service issues with the Trent 1000, the Board has kept very close to our customer engagement throughout the year and received specific feedback from the Civil Aerospace Business President on the issues and mitigation plans and their impacts on our customers, which greatly influenced the Board's deliberations and support for the Executive Team when considering: ▸ our strategy and the transition of technologies, capabilities, resources and value to meet our business horizons (see page 10) ▸ increasing our stock of spare engines and accelerating growth in our MRO network (see page 8) ▸ future technologies, specifically our withdrawal from the competition to power Boeing's NMA platform, enabling us to focus on the development of innovating new technologies, such as UltraFan (see page 26) and accelerating our electrical strategy (see page 11) ▸ product safety and asset integrity throughout the transformation (see page 107) ▸ the introduction of a new balanced scorecard of metrics for each business which would demonstrate whether we are meeting our commitments to our customers across our businesses (see page 15) ▸ key auditing judgements and estimates in respect of customer loss-making contracts and restructuring costs as a result of the Trent 1000 in-service issues (see page 82)
Investors	The Investor Relations team is in constant dialogue with investors and reports regularly to the Board on shareholder feedback, especially post results. The Chief Executive and Chief Financial Officer, supported by members of the Executive Team, meet with investors, following both the preliminary and interim results, as well as at various times throughout the year. We held an event in April for our institutional investors focused on environmental, social and governance (ESG) matters which was very well received. The Chairman, together with the relevant committee chairmen, the Company Secretary and one of our Board apprentices, provided insights into our ESG initiatives which were followed by engaging and interactive sessions in smaller groups. In addition, Ruth Cairnie and Irene Dorner met with a number of shareholders as part of the consultation on our remuneration policy. The Chairman, Senior Independent Director and members of the Board make themselves available to meet with institutional investors when requested and the Board hold our AGM in different locations in order to reach a wider shareholder base. We recognise the importance of our investors as a key stakeholder in our discussions and ensure that we are able to create confidence in our Company through: ▸ financial performance and the economic impact of our decisions ▸ robust governance and transparency of reporting ▸ delivering a sustainable, stable and predictable performance

OUR BOARD APPRENTICES

Our current Board apprentice cohort comprises six individuals from different parts of the Group including Civil Aerospace, Defence, corporate functions and one of our joint ventures.

They are based in France, Singapore, US and UK and have been selected through our talent and succession process. We intend to extend this successful programme to a third cohort which will start during the course of 2020. You can read more about how the programme operates on pages 69 and 77.

Employees	The Board recognises that it is through our people that we fulfil our potential, achieve our vision and execute our strategy. For this reason, we take the role of Employee Champion very seriously to ensure there is a voice of the employees in the boardroom. Irene Dorner has continued in her role as Employee Champion for a third year and meets with employee groups and attends employee stakeholder engagement meetings. Irene has a programme of events which, during the year, included attendance at: the launch of EAST, our Asian employee resource group; two UK Council meetings; a meeting of our local ethics advisers; a meeting with the ethics and compliance and case management teams; the diversity & inclusion and sustainability focus groups in Singapore; and an event hosted by PRISM, our LBGT+ employee resource group on how to make the workplace more inclusive. Irene also has regular dialogue with the Group People Director and together they review the outcomes from the employee surveys and Ethics Line reports. Irene can be contacted by any employee by email. Beverley Goulet also continued in her role as the Board's Employee Champion for our North American employees, this year concentrating on our smaller sites, holding roundtables with groups of employees at each one. The Board Champions are supported by an employee stakeholder engagement group where we discuss what we have learnt and plan future schedules. Having now run this programme for a few years, we are considering ways to develop it further. This will include a three-year programme of meetings and events to reach across all our employee groups and to engage with more employees in planning how the programme is structured. Irene and Beverly regularly provide feedback to the Board on employee topics of interest and/or concern. The direct link that they provide between the employees and the Directors is proving to be extremely valuable, particularly through this period of extensive change. The main themes that they reported this year were on transformation and culture; the importance of the relationship with the UK unions; progress with the anti-bullying and harassment campaign; leadership capability; communications; and stress and mental wellbeing. Irene and Sir Frank Chapman also requested a report from the head of ethics and compliance on the proposed changes to the UK defined benefit pension scheme (see page 110). During the year, our now regular Meet the Board event was held in Bristol, UK and smaller town hall events were held in Singapore, Hong Kong, Beijing and Xi'an, China. We also held a 'Yammer' session with Lewis Booth and Stephen Daintith during which any employee could ask questions live, online. The Directors take every opportunity to meet with local employees when visiting different business locations. For example, when visiting Dahlewitz, Germany three of our Non-Executive Directors took the opportunity to have lunch with a group of our high-potentials and young engineers. The Board discusses employee relations regularly and this year, particularly, in relation to transformation and the culture agenda. As can be read in the People and Culture report (pages 45 to 48) and the committee reports, the Board reviews both the behaviours and statistics on safety and diversity & inclusion as well as the talent management agenda at all levels across the Group. Finally, when considering M&A activity, the Board always remains mindful of any impacts on employees.

Partners	The Group's global supply chain is a vital contribution to its performance, with significant investment in resources to ensure the complex global supply chain is resilient and efficient. Suppliers' interests are considered as part of the Board's discussions on manufacturing strategy and when reviewing specific projects. Critical suppliers are, of course, considered as part of the assessment of the business continuity risks. The Board supports our Executive Team who work collaboratively with our suppliers to continue to improve operational performance through various means: - Sir Kevin Smith's ongoing meetings with companies in our supply chain to hear their views first hand - the Board's assessment of the business continuity risk including critical suppliers (see pages 51 and 80) - a full review of the Group's supplier payment terms as part of the decision to withdraw from the UK Government's prompt payment code following a change in the assessment approach. This in no way changes the Group's demonstrable commitment to the fair and appropriate treatment of all our suppliers - endorsement of our global supplier code of conduct which sets out the behaviours, practices and standards we expect to see demonstrated and complied with, together with our associated certification and risk monitoring processes (see page 49) - availability of our value chain competitiveness improvement framework to our industry partners, providing a suite of lean, best practice principles and tools required to operate and improve manufacturing value chains (see www.rolls-royce.com)
Communities	On their site visits, Directors will meet with relevant community groups whenever possible and will engage with certain community programmes should they be requested to do so. Irene Dorner and Beverly Goulet will always take the opportunity to meet with relevant community groups as part of their roles as Employee Champions. Details of the Group's outreach in 2019 are set out on page 46 and include: - STEM activities, including the Rolls-Royce Schools Prize for Science & Technology at the Science Museum in London, UK, attended by both Sir Ian Davis and Irene Dorner - investments, both time and money, in communities local to our operations, with all employees encouraged to commit Company time to community and STEM projects
Governing bodies and regulators	The Board recognise the importance of governments and regulators as stakeholders. Not only are governments across the world customers but they also support the Group's investment in infrastructure and technology. The focus on regulators benefits from the previous experience of Lee Hsien Yang, having been chairman of the Singapore CAA. The General Counsel provides regular updates to the Board on compliance with regulators and the Safety, Ethics & Sustainability Committee discusses how the business engages with airworthiness regulators as well as receiving updates on the continuing dialogue and co-operation with prosecutors, regulators and government agencies. The Board is updated on the Group's engagement with the tax authorities and the related regulatory landscape is discussed by both the Board and the Audit Committee. In addition, meetings with ministers and senior officials are held as relevant throughout the year, with the Chairman supporting the Chief Executive's engagement programme at various airshows. Of particular note during 2019: - Lewis Booth and Pamela Coles met with Sir Donald Brydon to discuss his independent review on the quality and effectiveness of audit in the UK market - Irene Dorner and Pamela Coles met with the Trades Union Congress, 'the voice of Britain at work', to share ideas on employee engagement initiatives in large corporates - Sir Ian Davis and Lee Hsien Yang held meetings with HM Ambassador to the People's Republic of China (PRC) and the Ministry of Industry and Information Technology of PRC to gain a perspective on relations between the UK and China and to discuss the Group's strategic direction - both Sir Frank Chapman and Irene Dorner travelled to Singapore in September and met, amongst others, with the Economic Development Board and the British Chamber of Commerce - the creation of a government relations centre of excellence, as part of the transformation programme, to bring together the global government relations team into a community to shape how government relations are delivered and how it adds value for the Group

Board induction and development

The Chairman and Company Secretary arrange a comprehensive, tailored induction programme for newly-appointed Non-Executive Directors, which includes dedicated time with the Executive Team and senior management and scheduled trips to business operations. The programme is tailored based on experience and background and the requirements of the role.

All Directors visit the Group's main operating sites as part of their induction and are encouraged to make at least one visit to other sites each year throughout their tenure. In 2019, Board members visited locations including: Dahlewitz and Friedrichshafen, Germany; Derby and Bristol, UK; Pascagoula, Novi and Mankato, US; Beijing, Xi'an and Shanghai, China; Hong Kong and Singapore. We regard these site visits as an important part of continuing education as well as an essential part of the induction process. They help Directors understand the Group's activities through direct experience of seeing processes in operation and by having discussions with a range of employees.

George Culmer was appointed to the Board in January 2020 and at that time joined the Nominations & Governance, Audit, and Safety, Ethics & Sustainability Committees. Since his appointment, he has embarked on his induction programme and met with members of the Executive Team. George has visited Civil Aerospace in Derby, UK and will be visiting both Defence in Bristol, UK and Rolls-Royce Power Systems in Friedrichshafen, Germany in early April 2020.

It is important that the Directors continue to develop and refresh their understanding of the Group's activities. To facilitate this, the Board met local management at its meeting in May in Bristol, UK. More detail of the Board's engagement with its stakeholders is set out on pages 70 to 72.

It is also important that the Directors regularly refresh and update their skills and knowledge and receive relevant training when necessary. Members of the Board also attend relevant seminars, conferences and training events to keep up-to-date on developments in key areas.

Board induction programme for George Culmer

Timing	People to meet	Key topics covered
Within first three months	Chairman	Overview of the Board Nominations & Governance Committee
	Committee chairmen	Overview of committees Plan of work for the year Current issues
	Chief Executive	Business model Current strategic priorities Opportunities/risks Current issues
	Chief Financial Officer	Finance, treasury, M&A and tax overviews Budget Accounting issues
	Company Secretary	UK Corporate Governance Code and directors' duties UK listed company requirements Rolls-Royce framework Board arrangements and meeting dates
	Executive Team members and senior management	Overview of each area of responsibility, including: — markets and competition — operational and financial performance including KPIs — functional responsibility — current issues
	Internal and external auditors	Audit report and findings Financial and non-financial controls Accounting judgements

Board effectiveness

Board and committee review

In 2018, having undertaken both benchmarking and tender exercises, Belinda Hudson Limited (BHL), expert in enhancing board effectiveness, was appointed for a three-year term to undertake our externally-facilitated effectiveness reviews. BHL's appointment was based on cultural fit, the research that BHL had undertaken which highlighted the areas that needed addressing, and commercial competitiveness. BHL had no other connection with the Company nor its Directors.

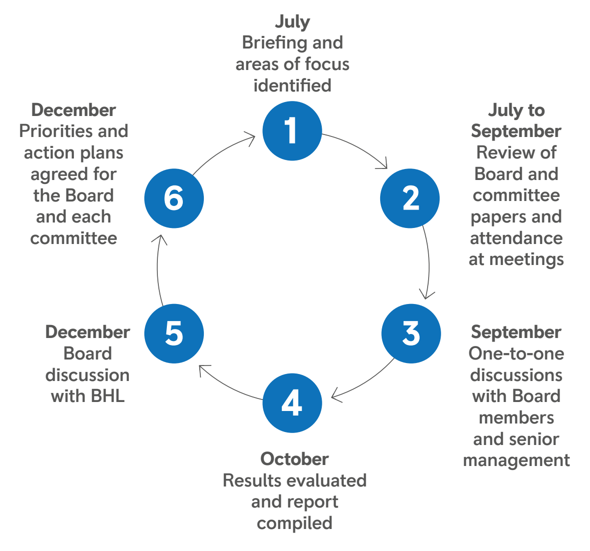
Following a comprehensive review in 2018, a slightly less in-depth review was conducted in 2019. As in 2018, it covered Board composition and dynamics, the Board's role and the Board at work but with particular focus on those areas identified as requiring further development during the previous year's review.

The effectiveness of each of the Board's committees was taken into account as part of the evaluation.

This review took the form of: confidential one-to-one discussions between BHL and members of the Board and several senior management executives; and BHL's attendance at the Board's two-day meeting in September to review the Group's operational and financial performance. The Board discussed the findings of the report at its meeting in December which BHL attended. BHL has reviewed and agreed this disclosure of Board effectiveness.

At a private meeting of the Non-Executive Directors, Sir Kevin Smith, Senior Independent Director, led a review of the Chairman's performance without the Chairman present. The Nominations & Governance Committee also met without any management present to discuss the performance of the Chief Executive. The meetings concluded that both the Chairman and the Chief Executive continued to be effective and constructive feedback was shared with each of them.

Stages of the Board and committee effectiveness review



Progress on key areas

Areas of focus	Focus for 2019	Progress in 2019	Focus for 2020
Board composition and dynamics	Continued focus on the Board succession programme and skills matrix together with a review of the composition of the Board's committees to maximise co-ordination across their respective duties and to prepare for future Board changes.	The 2019 evaluation concluded that one of the Chairman's strengths is his approach to Board composition and succession planning and that Rolls-Royce has the ability to attract very strong candidates as Non-Executive Directors.	The Board could be clearer in the communication of their priorities and expectations with the Executive Team.
The Board's role	With engagement from different parts of the business, a restructuring update to be provided at each Board meeting with a watchful eye on the cultural impact as the transformation programme continues to be embedded across the Group.	The evaluation showed that the agendas have been well structured throughout 2019 and the focus has shifted to the necessary issues.	Continued close scrutiny of the plans and risks relating to the transformation programme. There is scope for the Board to add more value as the focus is increased on strategic issues and opportunities.
The Board at work	Emphasis on the co-ordination of agendas and papers between the Board and its committees and the Executive Team to strengthen further the linkage and feedback mechanisms.	The quality of the information provided to the Board has improved during 2019, particularly for the operational and financial review day in September and on the competitive environment. The evaluation also identified that the work of each of the committees remained effective.	Continued support and linkage between the work of the Executive Team and the Board to ensure they are aligned for success.

NOMINATIONS & GOVERNANCE

SIR IAN DAVIS
Chairman of the Nominations & Governance Committee

Key highlights

- Re-appointment of Sir Ian Davis and Lee Hsien Yang, each for a further three-year term
- Appointments of George Culmer and Dame Angela Strank as Non-Executive Directors
- Updated framework
- Diversity & inclusion and career framework reviewed

Introduction

The Committee ensures that the composition of the Board is appropriate and relevant so that the Board is in the best position to oversee operational performance and to drive the Group's strategy. We have considerably improved Executive Team succession with a broader list of credible successors with improved diversity.

The Committee also keeps the Group's corporate governance arrangements under review. We strive to take an innovative approach in all that we do and that includes our approach to governance. During the year, we updated our framework expanding it to include our core decision rights and the restructuring of our RRMS, aligning and simplifying them as part of the Group's transformation programme and the articulation of our freedom within a framework culture. We have continued with our Meet the Board events, with a very well attended meeting in May following our AGM as well as smaller events scheduled for when the Non-Executive Directors are visiting our sites. Our Board apprentice programme has matured and we have just completed our third year since the introduction of our Board Employee Champion role. In April, we held a very well attended ESG event for our investors.

Membership and operation of the Committee

All members of the Committee are independent Non-Executive Directors. Our biographies are on pages 62 to 64 and meeting attendance is on page 66. No Director attends discussions relating to their own appointment.

The Committee's responsibilities are outlined in its terms of reference which can be found at www.rolls-royce.com. We review these annually and refer them to the Board for approval. No changes have been made in 2019. This follows a detailed review in 2018 to ensure alignment with the principles of the Code.

Other attendees

In addition to the members of the Committee, the Chief Executive attends when it is considered appropriate.

Committee evaluation review

Belinda Hudson Limited (BHL) was appointed for a second year to undertake a light touch review of the Board and committees, following a full review in 2018. The effectiveness review process of the Board and its committees is discussed in greater detail on page 74 together with overall findings.

Principal responsibilities

Board and committee composition

- Review the structure, size and composition of the Board and its committees regularly.
- Evaluate and consider the Directors' conflicts of interest.

Board nominations

- Recommend new appointments to the Board.
- Oversee the induction plans, training and site visits for the Directors.

Succession planning

- Consider succession plans for Directors and senior management.
- Oversee the development of a diverse pipeline for succession.
- Review implementation of diversity & inclusion policy.

Evaluation of Chairman, Chief Executive and Non-Executive Directors

- Evaluate annually the Chairman and Chief Executive.
- Review the independence of the Non-Executive Directors.

Corporate governance

- Review the Group's global governance framework.
- Keep up-to-date with the changing governance landscape and report on the Group's corporate governance practices.

Principal risk

- Talent and capability.

Areas of focus for 2020

- Culture and behaviour
- Internal governance – embedding the changes
- Board succession
- Diversity & inclusion

Nominations & Governance Committee focus during 2019

Area of focus	Matters considered	Outcome
Culture and behaviour and employee engagement	Employee champion update.	Irene Dorner, in her role as Employee Champion, reported on her meetings with the UK Council and on the relationships with the UK Unions as well as the views across the middle management population on simplification and restructuring. Beverly Goulet also reported on her increasing activities across North America.
	Career and governance framework reviews.	When reviewing the work in these areas the Committee particularly considered the impact of the changes on culture and behaviours.
Diversity & inclusion	Update on diversity & inclusion (D&I).	The Committee received a detailed update on the work on our D&I agenda across the Group. You can read more about our diversity & inclusion programmes on pages 47 and 48.
Oversight of principal risk – talent and capability	The principal risk is considered when discussing talent and capability.	The Board met in full to review talent and capability as development of our leaders is critical to ensuring the right culture and behaviours are embedded; and to ensure we maintain the right skills and capability for future growth.
Board and committee composition	Reviews of the composition of the Board and committee membership.	The Committee considers the current skills, experience and tenure of the Directors and assesses future needs against the longer-term strategy of the Group and recommended the re-appointment of Lewis Booth for a further year to provide continuity of support to the Audit Committee, as set out on page 77.
Board nominations	Re-appointment of the Chairman for a further three-year term. Re-appointment of Lee Hsien Yang as a Non-Executive Director.	Following individual reviews of the Chairman and Lee Hsien Yang the Committee satisfied itself that both continued to be committed and effective.
	The appointment of Irene Dorner as Chairman of the Remuneration Committee.	The Committee gave particular consideration to the appointment of Irene Dorner as Chairman of the Remuneration Committee (see pages 59 and 60).
	The appointments of George Culmer and Dame Angela Strank as Non-Executive Directors.	Members of the Committee were involved in the interview process for the two new Non-Executive Directors and the Committee recommended the appointments of both George Culmer and Dame Angela Strank to the Board. More detail can be found on page 77.
Succession planning	Progress on succession planning.	The Committee focused primarily on the approach to Executive Team succession and also received a detailed presentation on the people framework. (See page 45).
	Consideration of the Board composition.	The Committee gave particular consideration to the composition of the Board through to the AGM in 2021. (See page 77).
Evaluation of Chairman, Chief Executive and Non-Executive Directors	Annual review of the effectiveness of the Chairman and the Chief Executive, led by the Senior Independent Director and the Chairman respectively.	Feedback from the evaluations was shared directly with the Chairman and Chief Executive and the Chief Executive's objectives for 2019 were agreed.
	Annual review of whether the Non-Executive Directors remained independent, in accordance with the Code.	The review concluded that all Non-Executive Directors remained independent.
Corporate Governance	The Committee approved the updated governance framework and Group policies.	The Committee approved amendments to the Group's governance framework which had been enhanced considerably to articulate the freedom within a framework culture (see page 61). The Committee considered the key trends in UK governance and the appropriate responses to them for Rolls-Royce.

Board and committee composition

Both Brad Singer and Ruth Cairnie stepped down from the Board in December 2019. Since Ruth's departure, this temporarily reduced the number of women on the Board to three. However, we have recently announced that Dame Angela Strank will join the Board from 1 May 2020. We currently have one person of colour on our Board.

Irene Dorner was appointed as Chairman of the Remuneration Committee with effect from 1 January 2020, having joined that committee in August 2019. You can read more about our rationale for that appointment on page 59.

Lewis Booth will have completed nine years on the Board in May 2020 and will step down as Audit Committee Chairman at that time. However, the Committee recommended to the Board that he remain as an independent member of the Board and as an Audit Committee member. He will provide continuity of support to Nick Luff as he takes over as Chairman of the Audit Committee following the 2020 AGM, particularly at a time of continuing transformation in the finance function.

The Committee also agreed to recommend to the Board that Sir Frank Chapman remains as a Director and Chairman of our Safety, Ethics & Sustainability Committee, noting that his nine-year term is currently due to end in November 2020. We consider that he will remain independent and we value his significant support for our safety, ethics and sustainability agenda.

Subject to shareholder approval at the 2020 AGM, both Lewis and Sir Frank will step down from the Board no later than the 2021 AGM.

Board nominations

In February 2019, the Committee recommended to the Board the re-appointment of Sir Ian Davis as Chairman for a further three-year term. This followed the annual evaluation that was carried out by Sir Kevin Smith, Senior Independent Director, and was the subject of a thorough review as it is Sir Ian's third three-year term. In December 2019, following a detailed review, the Committee also recommended to the Board the re-appointment of Lee Hsien Yang for a third three-year term.

Prior to making any new appointments to the Board, the Committee considers the skills and attributes required and, together with the Chairman, agrees a Non-Executive Director profile. The Committee also provides input into a shortlist of candidates for the role.

As announced in November 2019, George Culmer was appointed as a Non-Executive Director with effect from January 2020. George is a member of the Nominations & Governance Committee, Audit Committee, its Data Security Committee and the Safety, Ethics & Sustainability Committee.

We have also recently announced the appointment of Dame Angela Strank who will join the Board on 1 May 2020 as a Non-Executive Director and a member of the Nominations & Governance Committee, the Safety, Ethics & Sustainability Committee and the Science & Technology Committee.

Both George and Dame Angela met with the Chairman and a number of other Non-Executive Directors as well as the Chief Executive and the Chief Financial Officer. You can read the full biographies for George and Dame Angela at www.rolls-royce.com.

For both appointments, the Committee appointed MWM Consulting. MWM Consulting has signed up to the voluntary code of conduct for executive search firms and had no other connection to the Company or its Directors during the year.

As required under the Code, any additional external appointments taken up by Directors during the year were considered by the Committee and approved by the Board in advance. For instance, during the year consideration was given to the appointment of Irene Dorner as chair-designate of Taylor Wimpey. As part of the Board's discussions, we considered all of Irene's appointments and ensured they were not outside the parameters set by ISS, which the Board has found to be a useful gauge when discussing whether there is potentially any impact on Directors' time commitment when taking on additional external appointments. It was noted that Irene had always maintained an excellent level of attendance at both Board and committee meetings during her tenure as well as embracing fully her role as Employee Champion. The Board concluded that Irene would be able to continue to allocate sufficient time to Rolls-Royce. They therefore approved the appointment.

The Company Secretary ensures that new Directors have a thorough and appropriate induction programme. More detail about inductions and continuing development can be found on page 73.

Succession planning

The Committee regularly reviews succession planning at Board, Executive Team and senior management levels. The Committee plays a vital role in promoting effective Board and leadership succession, making sure it is fully aligned to the Group's strategy.

This year, the Board considered the principal risk relating to talent and capability and reviewed succession at the most senior levels of the business including a number of business-critical roles. The talent process emphasises the need for individuals to have a balance of judgement, drive and influence and the importance of ensuring that the desired culture and behaviours continues to be embedded. We were pleased to note the considerable improvement in succession plans, following the increased focus on leadership talent and the succession pipeline in 2018. The Board also recognised the importance of maintaining the right skills and capability for future growth.

Board apprentice programme

Our Board apprentice programme is now in its third year. Six individuals from different areas of the Group were selected for the 18-month programme via the talent and succession process. The purpose of the programme is to provide these individuals with leadership development experience and demonstrate our commitment to their career progression and development as leaders in the organisation.

Each apprentice joins two Board committees, attending each one for nine months. In addition to this, they are able to participate in supplementary committees to broaden their experience, attend masterclasses on a variety of board-relevant topics and take advantage of frequent networking opportunities. Throughout the programme, each apprentice is mentored by two Board members and sponsored by an Executive Team member as well as attending one-to-one sessions with the Chief People Officer. At the end of the programme, they will have an opportunity to provide feedback in a reverse-mentoring session with the Board (see page 69).

Diversity & inclusion

D&I continues to be an area of focus for the Board and for the Group as a whole. We support and monitor Group activities to increase the percentage of senior management roles held by women and other under-represented groups across the organisation. In April, the Committee was updated on the Group's approach to D&I.

We fully recognise that diversity in our Executive Team needs to be improved. However, we are pleased to see that we have a broader list of credible successors with improved diversity for this team

Board diversity policy

Objective	Progress
All Board appointments will be made in the context of the skills and experience that are needed for the Board to be effective.	The Committee regularly reviews the composition of the Board.
Maintain a balance so that, as a minimum, one third of the Directors are women.	The chart on page 62 shows that the current percentage of women on the Board is 25%. Following the appointment of Dame Angela Strank, effective from 1 May 2020, the percentage of women on our Board will be 31%. Our long-term aspiration is to meet and exceed the recommended voluntary target of 33%.
Support and monitor Group activities to increase the percentage of senior manager population* roles held by women and other under-represented groups to 25% by 2020. (See our current statistics on page 48).	Improving D&I remains a priority. We tracked progress against four areas: leadership and governance; attraction and recruitment; retention; and development. We were particularly pleased to note the strong progress made in attracting and recruiting more diverse people and the increase in the number of females in the ELG year-on-year.
Monitor, challenge and support internally-set targets for D&I at all levels across the organisation.	The charts on page 62 provide a clear picture of our Board diversity. Progress against our 2020 diversity targets across the Group are set out on page 48. We will set new targets out to 2025 during the course of 2020.

* Senior manager population is calculated as Executive Team and ELG. This population comprises 94 individuals, 19 (20%) are female. Senior management is described in the Code as the Executive Team, the Company Secretary and their direct reports. This population comprises 82 individuals, 21 (26%) are female. We have excluded administrative personnel and technical assistants from these numbers.

You can find the full policy at www.rolls-royce.com

(see page 47). More on our D&I strategy can be found on page 47 and progress against our 2020 targets on page 48.

Our Board diversity policy remains unchanged and we continue to ensure it remains in line with best practice. We continue to promote an inclusive and diverse culture and the Committee reaffirmed our aspiration to meet and exceed the recommended voluntary target of 33% of Board positions being held by women, while recognising that we will fall short of this target for a temporary period. We have always recognised that there may be periods of change on the Board where we may fall short of our stated aim for periods of time while the Board is refreshed.

Governance

We have kept under review the enhancements put in place in 2018 to ensure we meet both the regulation and the spirit of the new Code.

In 2019, we held another successful Meet the Board event, this time in Bristol, UK and the Non-Executive Directors held town hall sessions while on site visits in China, Hong Kong, US and Singapore. Irene Dorner and Beverly Goulet continued in their roles as Employee Champions. More can be read about their activities on page 71.

We also held our first ESG-focused event with presentations to investors and their governance teams from the Chairman, chairmen of each of our Board committees, the Company Secretary, Chief Technology Officer, Chief People Officer and one of our Board apprentices. Subjects covered included: the environmental impact of our products; electrification; sustainability; D&I; the Board apprentice programme; culture; and employee engagement. This was followed by Q&A sessions in smaller groups on ESG issues. Feedback from those who attended was very positive.

The Committee spent some time during the year considering the improvements being made to the Group's internal governance arrangements. The framework has been expanded into a number of areas since first being introduced in 2016 and the RRMS has been the subject of significant review and simplification, while ensuring our critical processes are safeguarded. We have an internal concept of freedom within a framework, an articulation of the parameters within which our businesses are expected to operate. Our original governance framework has now been incorporated within the framework and is part of the way the whole Group operates. This includes the introduction of a decision rights model, moving decisions as close to activity as possible.

The framework is also the governance mechanism for our subsidiary companies and our response to the Wates principles. Extracts from the framework are available on the website at www.rolls-royce.com.

You can read more about our framework on pages 60 and 61.

Conflicts of interest and independence

We continue to monitor and note potential conflicts of interest that each Director may have and recommend to the Board whether these should be authorised and whether any conditions should be attached to such authorisations. The Directors are regularly reminded of their continuing obligations in relation to conflicts and are required to review and confirm their external interests at least annually. This helps us to determine whether each of them continues to be considered independent.

During the year, no additional conflicts of interest were identified and the Committee advised the Board that it considered each of the Non-Executive Directors to be independent.

Looking forward

The Committee has made strong progress in a number of areas, particularly improving our internal governance and in ensuring our activities align with our ambitions for our desired culture and behaviours. We have made good progress on our D&I agenda but still have further to go. We will continue to work to ensure our governance initiatives aspire to be best in class and use our innovation in this area to align our governance with the best interests of the Group as a whole, while remaining thoughtful and appropriate for all our stakeholders.

Sir Ian Davis
Chairman of the Nominations & Governance Committee

AUDIT

LEWIS BOOTH
Chairman of the
Audit Committee

Key highlights

- IFRS 16 embedded
- Trent 1000 exceptional charges
- Focus on assessment of onerous contracts
- Recognition and recoverability of deferred tax assets
- Focus on risk management and internal control systems, including cyber security

Introduction

I am pleased to present the 2019 report of the Audit Committee which describes how the Committee has carried out its responsibilities during the year. This will be my last report as the Chair of the Audit Committee and I know I will be leaving the Committee in Nick Luff's good hands. I would like to thank the members of the Committee, the executive management team and the external auditors for the open discussions that take place at our meetings and the importance they all attach to its work.

We have had a number of key issues to consider in 2019, most significantly:

— key judgements and estimates in accounting for the Trent 1000 in-service issues and provisions made in respect of customer loss making contracts and restructuring costs;

— assessment of the recognition of UK deferred tax assets;

— the balance sheet position of the Group and enhanced cash disclosures;

— presentation of the impact of the pension buy-out in the UK;

— judgements in respect of various M&A activity in the year;

— the carrying value of investments, tangible and intangible assets; and

— the adoption of the new leasing standard, IFRS 16.

The Audit Committee also participated in a number of deep dives focused on long-term contract accounting judgements and finance transformation.

Membership and operation of the Committee

In addition to myself, members of the Committee are George Culmer, Beverly Goulet, Lee Hsien Yang and Nick Luff. Irene Dorner served as a member of the Committee during the year, stepping down in December 2019. George Culmer joined the Committee on 1 January 2020. All members of the Committee are independent Non-Executive Directors. For the purposes of the Code and DTR 7.1, George Culmer, Beverly Goulet, Nick Luff and I have recent and relevant financial experience. The Board has confirmed that it believes the Committee as a whole has competence relevant to the Company's sector. Our biographies are on pages 62 to 64 and our meeting attendance is shown on page 66.

The Committee's responsibilities are outlined in its terms of reference which can be found at www.rolls-royce.com. We review these annually and refer them to the Board for approval. No changes have been made in 2019. This follows a detailed review in 2018 to ensure alignment with the principles of the Code.

Other attendees

In addition to the members of the Committee, the Chairman, Chief Executive, Chief Financial Officer and any of the Non-Executive Directors may attend one or more meetings at the Committee Chairman's invitation. The Committee is supported by the General Counsel, the corporate governance director, the group controller, the head of group reporting, the director of risk and internal audit and the external auditors.

Committee evaluation review

Belinda Hudson Limited (BHL) was appointed to undertake a light touch review of the Board and committees for a second year, following a full review in 2018. The effectiveness review process of the Board and its committees is discussed in greater detail on page 74 together with the overall findings.

Principal responsibilities

Financial reporting

- Financial announcements, focusing on: accounting policies, judgements and estimates; inclusion of appropriate disclosures; compliance with relevant regulations; and whether the Annual Report is fair, balanced and understandable.

Risk and control environment

- Monitor the effectiveness of the risk management and internal control systems.
- Review concerns of financial fraud.

Principal risks

- Business continuity, market and financial shock and IT vulnerability.

Internal audit

- Scope, resources, results and effectiveness.

External audit

- Relationship with, and effectiveness of, the external auditor.
- Approve the external auditor's terms of engagement and fees.

Areas for focus in 2020

- continuing oversight of the risk management and internal control environment
- through our Data Security Committee, reviewing our principal risk: cyber threat
- supporting risk owners to assess the effectiveness of mitigating controls
- assessing the impact of changing regulation on our risk management plans
- keeping appraised of any developments with the audit reforms in the UK

Audit Committee focus during 2019

Area of focus	Matters considered	Outcome
Financial reporting	The appropriateness and disclosure of accounting policies, key judgements and key estimates with a focus on: — the methodology for the identification of abnormal costs on the Trent 1000 programme; — assessment of the costs to be included in the assessment of customer contract losses, in particular the determination of which costs are incremental to the customer; — recognition and disclosure of restructuring costs; — judgements and estimates necessary to assess the recoverability of the UK deferred tax assets; — the accounting for M&A activity in the year including the disposal of Commercial Marine, North America Civil Nuclear business and the acquisition of Siemens' eAircraft business; — accounting for the pension buy-in/buy-out in the UK; — assessing the recoverability of tangible and intangible assets with a specific focus on programme intangible assets in Civil Aerospace and the carrying value of the investments the Company holds in the underlying Group; — assessing the balance sheet position of the Group and the transparency of our disclosures in respect of cash generation; and — adopting IFRS 16 *Leases*. The implementation project for IFRS 16. In particular, the preparation of the restated information on an IFRS 16 basis which is included in note 1 to the Consolidated Financial Statements. The form and content of the Annual Report with a specific focus on APMs and their reconciliation to statutory numbers.	The accounting policies, judgements and estimates are appropriate and balanced. Agreed the judgements and estimates to adopt IFRS 16 and the assessment of the impact included on page 82. Confirmed the accounting policies, judgements and estimates are appropriate and balanced. As part of enhancing our disclosures we have provided additional information with regard to the sensitivity of the estimates to changes in key assumptions. These are summarised in note 1 to the Consolidated Financial Statements. Reconciliations of APMs to their statutory equivalents are set out in notes 2 and 28 to the Consolidated Financial Statements. Reviewed the additional information that has been made in respect of our assessment of the carrying value of the Company's investment in its subsidiaries. Satisfied ourselves with the adequacy of disclosures in respect of cash generation. See notes 1, 14 and 18 to the Consolidated Financial Statements. Reported to the Board that the Annual Report, taken as a whole, is fair, balanced and understandable.
Risk and control environment	Improvements in the approach to risk management and internal control systems, including in relation to financial reporting controls. The processes for identifying and managing risks. The effectiveness of the Group's risk management and internal control systems. The progress against the commitments under the DPAs as they relate to financial reporting. The process and assumptions underlying the going concern and viability statements.	Recognised improvements in the analysis of risk appetite, risks at remote sites and increased focus on emerging risks, and identified areas for future improvements, including in relation to financial reporting controls. Satisfied ourselves that the processes for identifying and managing risks are appropriate and that all principal risks and mitigating actions had been subject to a detailed review by the Board or a Board committee during the year. Reported to the Board that an appropriate process is in place to make the going concern and viability statements. Particular attention was given to the going concern status of the Group's material subsidiaries.
2019 Principal risks	Management's assessment of the risk of, and activities to manage, a business continuity event. The activities in place or required to prevent, detect and recover from any breaches due to cyber threats. The Group's policies, procedures and controls for identifying, managing and mitigating a market or financial shock.	Processes and plans are in place to manage the risks associated with business continuity, cyber and market or financial shock.
Internal audit	The effectiveness of the internal audit function, matters and themes arising as a result of the audit work and resolution of any associated actions.	The scope, extent and effectiveness of internal audit are appropriate and there is a plan to sustain this.

Audit Committee focus during 2019 continued

Area of focus	Matters considered	Outcome
External audit	The approach, scope and risk assessments of external audit and the effectiveness and independence of the external auditor. The extent of non-audit services provided by the external auditors.	No concerns over the nature and amount of the non-audit services provided by PwC. Recommended that PwC be re-appointed as the Group's auditor at the 2020 AGM.

Business audit committees

Each of the Group's businesses has its own risk and audit committee. These committees continue to be chaired by the respective business president or functional leader and comprise business leadership and functional team members, senior finance personnel and PwC. They meet at least twice a year and:

- review the effectiveness of business and functional risk management activities including the identification, ownership and assessment of significant risks;
- consider the existence and appropriateness of associated mitigating controls;
- consider the effectiveness of mitigating controls including with reference to assurance findings or any relevant incidents arising;
- review the application of accounting policies, judgements and estimates; and
- inform areas for further consideration at our meetings.

Members of the Committee are invited to attend the business risk and audit committee meetings and routinely receive reports on themes and any significant matters arising. During 2019, the business risk and audit committees focused on clarification of risk and control ownership in the empowered business structure and assessing the appropriateness of assurance while also undertaking deep dives of specific risks in certain businesses.

Business and function presentations

In addition to reports from the business risk and audit committees, the businesses and functions attend the Audit Committee to provide a more in-depth view of relevant matters. During 2019, we considered:

- Defence – the current business environment, the status of the business internal financial control framework, the effectiveness of business risk management, the status of internal audit findings and other control-related incidents, accounting for long-term contracts;
- Power Systems – the status of internal audit findings, changes in the levels of the most significant business risks, the effectiveness of business risk management, key accounting estimates (including in respect of litigation and claims); and
- Group Tax – the main drivers of the Group's tax position, key judgements and estimates, the main areas of tax risk including consideration of tax audits and disputes and emerging risks including those associated with digitalised businesses, key sources of estimation uncertainty (in particular the recognition of deferred tax assets).

We also received regular updates on the finance transformation programme and the current status of certain Civil Aerospace risk mitigation plans, accounting judgements and financial reporting matters including in respect of Trent 1000.

Financial reporting

As I have previously noted, the Group has complex long-term accounting and every year we spend much of our time reviewing the accounting policies and accounting judgements implicit in our financial results. For 2019, we have focused on the key judgements and estimates underpinning the financial performance of the business and the adequacy of disclosures in respect of the balance sheet and cash generation (see page 82).

The Group has an established process for preparing the Consolidated Financial Statements, including:

- maintenance of internal financial controls – see page 83;
- monitoring of developments in financial reporting;
- review of financial statements by local management prior to submission to group finance for further review and explanations;
- certification by management of each business unit;
- preparation and review of consolidation adjustments;
- review of the draft Consolidated Financial Statements prior to submission to the Committee and the Board; and
- review of the Consolidated Financial Statements by the Committee and the Board together with reports from management and the auditors on significant judgements, estimates, changes in accounting policies and any other relevant matters.

The scope of the external audit is set out in PwC's report on page 194.

A summary of the principal matters we considered in respect of the 2019 Consolidated Financial Statements is set out in the table on page 82.

Fair, balanced and understandable

Since the year end, we have reviewed the form and content of the Company's 2019 Annual Report, together with the processes used to prepare and verify it. We have reported to the Board that, taken as a whole, we consider the Annual Report to be fair, balanced and understandable. We further believe the Annual Report provides the necessary information for shareholders to adequately assess the Company's position and performance, business model and strategy.

In making this assessment, we considered:

- the process for preparing the Annual Report, including a steering committee, the core team, and instructions to contributors;
- written representations from management in respect of the business reviews, sustainability, principal risks and Financial Statements;
- the completion of a regulatory compliance checklist;
- all reviews performed (including the Board, the Executive Team and PwC) and ensured that all feedback was appropriately reflected; and
- the presentation and discussion in the Strategic Report of: the underlying as well as reported results; the in-service issues on the Trent 1000 programme; and trends, in particular, the impact of individually significant items.

Areas of focus for the 2019 Financial Statements

Key issue	Matters considered	Outcome
Adoption of IFRS 16	Final judgements on the implementation of IFRS 16 and the appropriateness of the disclosures made in respect of key accounting policies and judgements.	We were satisfied that the judgements and estimates made are appropriate and consistent with the new requirements; that the disclosures of the impact in the Consolidated Financial Statements are appropriate; and that the Group has systems and processes in place to report on the new basis in 2019 (see note 1 to the Consolidated Financial Statements).
Alternative Performance Measures (APMs)	The clarity of the definitions and the reconciliations of the APM to its statutory equivalent.	Definitions refined and full reconciliations provided (see notes 1, 2 and 28 to the Consolidated Financial Statements).
Accounting for Trent 1000 in-service issues	Refined the methodology for identifying abnormal costs of wasted material, labour and other resources and the application of this to the Trent 1000 in-service issues (see note 1 to the Consolidated Financial Statements).	We were satisfied with the judgements taken in respect of which costs were included in the exceptional wastage charge and that these were abnormal costs that should be excluded from underlying performance (see notes 2 and 20 to the Consolidated Financial Statements).
Consideration of onerous contracts	Review of the nature of costs included in the assessment of onerous contracts, the discount rates applied in calculating the charge and the sensitivity analysis performed and appropriateness of disclosures.	We paid particular attention to those contract losses that were included in the Trent 1000 exceptional charge and the adequacy of the disclosures which are included in notes 2 and 20 to the Consolidated Financial Statements.
Disclosure of invoice discounting and supply chain financing arrangements	The nature of the arrangements and the disclosures included in the Consolidated Financial Statements.	In line with the Group's commitment to transparency, additional disclosures have been included in note 14 and note 18 to the Consolidated Financial Statements.
Deferred tax assets	Basis for the recognition of further UK deferred tax assets and the assessment of the recoverability of the asset and associated disclosures.	We confirmed the approach adopted and the additional disclosures included in note 5 to the Consolidated Financial Statements.
R&D capitalisation policy and application	In 2017, the Group refreshed the application of its R&D capitalisation policy. This year, we focused on the application of the policy and the consistency of approach across the businesses.	We concluded that there were no matters that required additional disclosure in the Consolidated Financial Statements.
Carrying value of intangible and tangible assets	The basis on which management assesses the risk of impairment, the methodology for calculating the recoverable amount, including the basis for the key assumptions, the discount rates and long-term growth rates. We also reviewed the sensitivity disclosures made in respect of goodwill and programme intangible assets.	Confirmed the appropriateness of the conclusions including the sensitivity analysis confirmed.
Going concern and viability statement disclosures	The basis for assessing the going concern assumption for the business and the principal risks for the Group and how these were modelled as viability scenarios.	We agreed with the basis of the assessments and the disclosures included on page 55.

Risk and control environment

Assessment of principal risks

All risks are managed through the risk management and internal control framework (the RMS described on page 50) in accordance with policies and guidance approved by the Board. On behalf of the Board, the Committee monitors the RMS, including continued developments and improvements. We continue to pay particular attention to the assessment and management of risks at remote sites and increased our focus on the identification and monitoring of emerging risks. The processes are designed to identify and manage, rather than eliminate, the risk of failure to achieve our business objectives.

In managing the identified risks, judgement is necessary to:

- evaluate the risks facing the Group in achieving its objectives;
- determine the risks that are considered acceptable;
- determine the likelihood of those risks materialising;
- assess the Group's ability to reduce the impact of risks that do materialise; and
- ensure the costs of operating particular controls are proportionate to the benefit provided.

We satisfied ourselves that the processes for identifying and managing the principal risks are appropriate and that all risks and mitigating actions had been subject, during the year, to a detailed review by the Board or an appropriate Board committee. Based on this and on our other activities, including consideration of the work of internal and external audit and attendance at the Committee by business and functional risk owners, we reported to the Board that a robust assessment of the principal risks facing the Group had been undertaken.

The principal risks arising are described on pages 51 to 54. These formed a key element of our assessment of the going concern and viability statements, described further below.

Internal control

The Board has overall responsibility to shareholders for the Group's system of internal control over its business and risk management processes and the risks identified through the risk management process. The Committee has responsibility for reviewing the system's operation and effectiveness. The system is based on business best practice and comprises:

- entity-level controls covering leadership and direction from the top; and
- specific control activities, covering detailed process controls, and internal and external assurance activities.

We have reviewed controls over the Group's principal risks and the key risks and critical processes in each of the Group's businesses. In addition, both the business audit committees and this Committee consider the external auditor's observations on the control environment.

During 2019, we reviewed the results of attestation and testing performed by the internal control and internal audit teams to confirm the effective operation of key financial controls across the Group. We also reviewed the progress of the programme to strengthen financial reporting and compliance controls to meet our DPA commitments, including the work to document and assess the process risks and design of controls in our key finance processes. We have made further progress in embedding a financial controls awareness and culture with additional training and guidance provided to our finance teams. We have strengthened our supervisory review and oversight controls with a specific focus on balance sheet integrity, including the development of IT systems to improve the consistency and rigour of manual processes and controls. This will continue to be an area of focus throughout 2020 alongside our broader finance transformation initiatives.

We have conducted a review of the effectiveness of the Group's risk management and internal control systems, including those relating to the financial reporting process, in accordance with the Code. Where opportunities for improvement were identified, action plans have been put in place and progress is monitored by the Committee. We consider that our review of the risk management and internal control systems, in place throughout 2019 and up to the date of this report, meets the requirements of the Code, the DTR and the FRC's guidance on risk management.

Going concern and viability statements

Having regard to the net liabilities of £3,354m on the Group's 2019 balance sheet, we paid particular attention to these assessments. We reviewed the processes and assumptions underlying the statements set out on page 55, considering in particular:

- the Group's forecast funding position over the next five years;
- the forecasts for material subsidiaries making up this position;
- an analysis of impacts of severe but plausible risk scenarios, ensuring that these were consistent with the risks reviewed by the Board as part of its strategy review;
- the impact of multiple risks occurring simultaneously;
- additional mitigating actions that could be taken in extreme circumstances; and
- the current borrowing facilities in place and the availability of future facilities.

As a result, we were satisfied that the going concern and viability statements have been prepared on an appropriate basis.

2019 Principal risks

As set out on page 65, the Board allocated certain principal risks to the Committee and we considered these in detail throughout the year. From our discussions, we are satisfied that all of the principal risks that we oversee have received significant management attention during the year. We reviewed:

Business continuity

In February, the head of risk shared lessons learned from a recent continuity related crisis management exercise. Following regular updates on the status of the mitigation plans in respect of the business continuity risk in Civil Aerospace, the director of risk and internal audit updated the Committee on business continuity risks related to external suppliers and internal facilities across all of the businesses in December.

Cyber

In May, the chief information officer and the cyber security director updated the Committee on cyber risks including the level of threat and nature of incidents arising, key risk mitigation and related assurance findings, and the status of IT infrastructure. The cyber security strategy was also reviewed. Cyber risk was considered by the Data Security Committee in January 2020.

Market and financial shock

In July, we considered risks associated with liquidity and our credit ratings focusing on our risk appetite, the nature of the current risks and their associated mitigating activities. Other risks reviewed at the Group's financial risk committee were also reported. Separately, we have incorporated any market or financial shock that could result from Brexit in the scenario analysis on which the viability statement is based.

Our risk management system

We satisfied ourselves that improvements have been made in the approach to risk management including further refining of our risk appetite metrics and strengthening of our controls over risks at remote sites as described on page 50. Future improvements should focus on simplification of our risk policies and guidance and additional support for risk owners in assessing the effectiveness of mitigating control activities.

Internal audit

The director of risk and internal audit regularly attends and reports to the Committee on risk and internal audit matters including:

- quarterly – a dashboard identifying key trends and headline findings from internal audit reports issued in the period and the status of related agreed actions; any key themes from internal audit's work and details of any specific significant findings raised that warrant the Committee's attention, including in respect of audits conducted as part of the Group's response to the DPAs; and
- annually – compliance with expenses policies for the Directors and the Executive Team; and an internal audit work plan for the following year.

I meet the director of risk and internal audit before each meeting and on an adhoc basis throughout the year, as do other members of the Committee, to discuss risk matters and the nature of internal audit findings in more depth. We continue to focus on the nature and number of issues raised by internal audit and the time to complete the related actions which continues to improve. However, the underlying root causes remain largely unchanged and form a critical part of our restructuring plans. The future work plan is risk-based, balancing focus on principal risk areas and on business as usual transactional activity where controls are understood to be mature and established. Internal audit also provides assurance to our transformation programmes and restructuring activities and incorporate the activities of our second line assurance functions in their approach. We monitor changes to their plan during the course of the year.

We considered and reviewed the effectiveness of the Group's internal audit function, including resources, plans and performance as well as the function's interaction with management. Based on the reports and discussion, we are satisfied that the scope, extent and effectiveness of internal audit work are appropriate for the Group and that there is an appropriate plan in place to sustain this.

External audit

PwC were appointed as the Group's external auditor for the financial year commencing on 1 January 2018 following a formal tender process in 2016. The external audit contract will be put out to tender at least every ten years. The lead audit partner, Ian Chambers, has been in post since PwC were appointed and he will be required to rotate after five years. Other key audit partners will also be required to rotate every five years. Any future audit tenders will be carried out in line with the FRC's practice aid for audit committees.

Other than the services detailed below, PwC have no other connection with the Company nor its Directors.

2019 audit

The Committee reviewed the quality of the external audit throughout the year and considered the performance of PwC, taking into account the Committee's own assessment and feedback, the results of a survey of senior finance personnel across the Group focusing on a range of factors we considered relevant to audit quality, feedback from the auditors on their performance against their own performance objectives and the firm-wide audit quality inspection report issued by the FRC in June 2018.

Based on these reviews, the Committee concluded that there had been appropriate focus and challenge by PwC on the primary areas of the audit and that they had applied robust challenge and scepticism throughout the audit. Consequently, as noted on page 81, the Committee has recommended to the Board that they be reappointed at the 2020 AGM.

In May 2019, PwC presented its audit plan, which identified its assessment of the key audit risks and the proposed scope of audit work. We agreed the approach and scope to be undertaken. Subsequently, an updated plan was agreed in November 2019, building on the work undertaken at the half-year.

Key risks and the audit approach to these risks are discussed in the Independent Auditor's Report (pages 194 to 202), which also highlights the other risks that PwC drew to our attention.

As part of the reporting of the half-year and full-year results, in July and February 2020, PwC reported to the Committee on its assessment of the Group's judgements and estimates in respect of these risks and the adequacy of the reporting. Where effective to do so, PwC also reported on its assessment of the Group's controls.

I meet with the lead partner prior to each Committee meeting and the whole Committee has a private meeting with PwC at least once a year.

During 2019, the Audit Quality Review Team (AQRT) of the FRC conducted a review of PwC's audit of the Group's Financial Statements for the year ended 31 December 2018. In January 2020, the AQRT provided their final report and I, as Chairman, have discussed the findings with both the FRC and the audit partner. Whilst there were no significant findings, some matters were identified as requiring improvement. PwC have reported to the Audit Committee their response to the findings and how the suggested improvements have been incorporated into the current audit along with continuation of the areas identified as being of a high standard.

Non-audit services

In order to safeguard the auditor's independence and objectivity, and in accordance with the FRC's ethical standard, we do not engage PwC for any non-audit services except where it is work that they must, or are clearly best-suited to, perform. Accordingly, our policies for the engagement of the auditor to undertake non-audit services broadly limit these to audit-related services such as reporting to lenders and grant providers.

Fees paid to PwC are set out in note 7 to the Consolidated Financial Statements. All proposed services must be pre-approved in accordance with the policy which is reviewed and approved annually. Above defined levels, my approval is also required before PwC is engaged. Quarterly, we also review the non-audit fees charged by PwC.

Non-audit related fees paid to the auditor during the year were £1.1m (including £0.4m relating to the review of the half-year results) representing 13% (2018: 10%) of the audit fee. Our annual review of the external auditor takes into account the nature and level of all services provided.

Non-audit services are provided by PwC where the auditor is required by law or regulation to perform the work. All other non-audit services are considered on a case-by-case basis in light of the requirements of the ethical standards and our own policy.

Based on our review of the services provided by PwC and discussion with the lead audit partner, we concluded that neither the nature nor the scale of these services gave any concerns regarding the objectivity or independence of PwC.

Compliance

During 2019, the Company complied with the relevant provisions of The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014, as disclosed within the external audit section.

Looking forward

We will continue to monitor our accounting policies whilst also focusing on:

- the risk management and internal control environment in relation to the transformation programme;
- the continuing finance transformation programme; and
- developments with the audit reforms in the UK following the publication of Sir Donald Brydon's review into the quality and effectiveness of audit in the UK.

As I previously mentioned, this is my last report as Chairman of the Audit Committee. I am pleased to be staying on as a member of the Committee and supporting Nick Luff as he takes over the reins during this ongoing period of transformation, particularly in the finance function.

Lewis Booth
Chairman of the Audit Committee

REMUNERATION

IRENE DORNER
Chairman of the Remuneration Committee

Key highlights

- New remuneration policy
- Outturns for 2019
- Wider workforce remuneration

Introduction

I am pleased to present my first report as Chairman of the Remuneration Committee, outlining what we have achieved in the year. I would like to take the opportunity to thank Ruth Cairnie for her commitment during her time as Chairman of the Committee. Having joined the Committee last August, I was able to accompany Ruth during our consultation meetings with shareholders on the remuneration policy.

Our remuneration policy

We undertook a review of our current policy this year, focusing on three key themes: alignment to vision and strategy; supporting the talent agenda; and alignment with the Code.

This review built upon the significant changes implemented in 2017, which were strongly supported by shareholders (96% vote in favour). We concluded that limited changes are required to our existing policy; the substantive changes we made three years ago continue to support the delivery of our vision and business strategy. We remain in a period of unprecedented business transformation with a clear focus on increased cash flow generation, so the drivers behind the design of the current policy remain very relevant. We believe that there is strong alignment in our incentive plans between executives and the interests of our shareholders, with the primary focus on improving free cash flow. This is a key performance metric in our incentives and so we have no current plans to change their design. However, as we continue to be at the forefront of developing cleaner power solutions, we expect that future incentive metrics will include environmental aspects and potentially other sustainability measures, subject to such metrics being robustly quantifiable and fully aligned with our business strategy.

In terms of our talent agenda, we have always taken a modest approach to executive reward and for the third year running are not proposing any changes in quantum for existing Executive Directors. However, we are mindful of the challenge of recruiting senior individuals from an increasingly global and diverse talent pool and are proposing a small amount of increased flexibility within the bonus quantum in case this is required for any future hire.

As part of our review, we have also taken on board the revised requirements of the Code. We have focused in particular on executive pensions and post-employment shareholding requirements. We have reduced the pension contribution rate for newly appointed executives and are introducing a requirement to maintain a significant shareholding for two years post-employment. In addition, coincident with changes being implemented for managers who are participants in our UK defined benefit pension plan, Warren East and Stephen Daintith have agreed to reduce their pension allowances over the next three years to align with the wider UK workforce.

These policy changes have been supported by the shareholders with whom we have consulted.

2019 outturns

2019 has been a challenging year, particularly in respect of the continuing Trent 1000 issues. However, while supporting our customers and responding to the Trent 1000 issues, Civil Aerospace improved its underlying profit significantly, with above target levels of free cash flow and profit. We have delivered a record number of widebody engines, introduced new engines into the business jet market and progressed a wide-ranging restructuring programme. Defence delivered strong financial performance and has positioned itself well for future opportunities. Power Systems revenue and profit continued to grow.

In determining the outcomes for bonus purposes, the Committee continues to take a rigorous approach to ensuring that executives are being rewarded for sustainable operational improvements in transforming the business and delivering a step change in operational cash flow. Whilst the Committee reviews in detail the underlying performance which underpins the bonus metric outturns, we also consider the outturn in the round. Turning to the metrics first, our key financial metrics are profit and cash, both achieved above target levels due to the hard work and commitment of our people. We delivered a strong free cash flow performance and a significant improvement in profitability, in challenging circumstances.

Our non-financial metrics are customer satisfaction and employee engagement. For bonus purposes, whilst our financial metrics delivered good progress, the non-financial elements were not where we would have liked them to be. We adopted a broader scorecard of customer metrics for the first time in 2019 and the below-target outturn reflected the challenges we experienced in Civil Aerospace, particularly on the Trent 1000, and the impact of supply chain challenges in Defence. In terms of our people measure, we continue to recognise the importance of transforming our business and culture. In 2019, we introduced a new survey provided by Gallup and were very pleased to see a record level of participation (72%). However, against a backdrop of transformation and operational headwinds, employee engagement fell short of our targets.

In assessing the final bonus awards, the Committee has also considered a number of factors including in particular Trent 1000, as well as HSE performance, quality of financial performance and the experience of our customers and shareholders. Whilst the Trent 1000 disruption already impacts the calculated bonus within the customer metric, the Committee felt that the calculated outturn did not sufficiently reflect the continuing disruption for our customers and financial impact on our shareholders. As a result, we exercised our discretion to reduce the overall bonus outturn for the Group metrics from 61% to 52.5% of maximum. The Committee felt that this was an appropriate adjustment to balance the experience of our customers and shareholders with a year of strong cash generation and effective management action to progress business transformation and address the in-service issues.

Our targets for the 2017 long-term incentive plan achieved 53% of maximum. This outcome reflects strong cash performance versus targets for the period, but less progress in terms of profit delivery and a disappointing overall total shareholder return.

Our reflection is that this is an appropriate outturn in the context of positive actions taken by Warren and his team to tackle our business challenges, whilst recognising the further progress needed to enhance the quality of our underlying financial results.

2020 salary review and incentives
The Committee has reviewed the salary levels of the Executive Directors and has concluded that there will be no increases in 2020 in line with most of the Group's management. This will be the third year of zero increases for Executive Directors.

Wider workforce
The Committee has always had a good appreciation of the Group's reward practices, including bonus plan design, gender pay and pay practices. During 2019, the Committee held an additional session to focus on reward approaches across the wider workforce, to gain a deeper understanding of the broader context against which we make decisions on total reward for senior management. The Committee will continue to review key metrics on the wider workforce to provide insight and context for our activity. This is the third year that we have reported on our CEO pay ratio. Our reward strategy for the Group's management population is currently focused on driving performance and behaviours consistent with our values. Incentives and performance enablement activities are structured to reward business and personal objectives, as well as behaviours.

We hope shareholders will continue to support our policy and implementation.

Membership and operation of the Committee

In 2019, members of the Committee were Ruth Cairnie, Lewis Booth, Beverly Goulet, Sir Kevin Smith and myself. I joined the Committee in August and Ruth Cairnie stepped down as Chairman at the end of 2019. All members of the Committee are independent Non-Executive Directors. Our biographies are on pages 62 and 64 and our meeting attendance is shown on page 66.

The Committee's responsibilities are outlined in its terms of reference which can be found at www.rolls-royce.com. We review these annually and refer them to the Board for approval. No changes have been made in 2019. This follows a detailed review in 2018 to ensure alignment with the principles of the Code.

Other attendees
In addition to the members of the Committee, the Chairman, Chief Executive, Chief Financial Officer and any of the Non-Executive Directors may attend one or more meetings at the Committee Chairman's invitation, although none were present during discussion of his or her own remuneration package. The Committee is supported by the Company Secretary, the Chief People Officer and the people director, performance and reward.

Advisers
During the year, the Committee had access to advice from Deloitte LLP's executive compensation advisory practice. Total fees for advice provided to the Committee during the year by Deloitte were £96,025 (2018: £73,415). Fees are based on a time and materials basis. Deloitte also advised the Company on tax, corporate compliance, employee global mobility, assurance and corporate finance and Deloitte MCS Limited provided consulting services. They also provided personal tax advice to both Sir Ian Davis and Lewis Booth. In addition, Stephen Daintith's son is employed by Deloitte. The Committee is exclusively responsible for reviewing, selecting and appointing its advisers.

Deloitte is a founding member of the Remuneration Consultants Group and adheres to its code in relation to executive remuneration consulting. The Committee requests Deloitte attend meetings periodically during the year and is satisfied that the advice it has received has been objective and independent.

Shareholder voting

The remuneration policy was last approved by shareholders at our 2017 AGM. The remuneration report was last approved by shareholders at our 2019 AGM. Details of voting are shown in the table below.

Principal responsibilities

- Determine the remuneration policy for the Executive Directors and set the remuneration for the Chairman, the Executive Directors and senior management.
- Review workforce remuneration and related policies and the alignment of incentives and rewards with our culture.
- Determine the design, conditions and coverage of annual incentives and LTIPs for senior executives and approve total and individual payments under the plans.
- Determine targets for any performance-related pay plans.
- Determine the issue and terms of all-employee share plans.
- Oversee any major changes in remuneration.

Areas of focus for 2020

- Continue to review incentive measures and targets to ensure that they remain aligned with performance and strategy, including ongoing consideration of sustainability measures
- Implement the new remuneration policy, subject to shareholder approval
- Gain further insights into the remuneration of the workforce to further inform decisions on senior management reward

Irene Dorner
Chairman of the Remuneration Committee

	For		Against		Withheld [1]
	Number of votes	%	Number of votes	%	Number of votes
Approval of the Directors' remuneration policy (4 May 2017)	1,357,109,903	95.79	59,613,198	4.21	2,505,008
Approval of the Directors' remuneration report (2 May 2019)	1,347,237,842	96.80	44,467,914	3.20	5,452,732

[1] Withheld votes are not counted towards the total percentage of votes cast.

Remuneration Committee focus during 2019

Area of focus	Matters considered	Outcome
Policy review and shareholder consultation	Review of remuneration policy to ensure alignment with business strategy and corporate governance requirements. Consultation with shareholders on proposed policy changes.	The Committee reviewed the current remuneration policy and concluded that it remained aligned to the business strategy and continued to support the transformation programme and focus on increasing free cash flow generation. A number of incremental changes were proposed and discussed with shareholders and their feedback was incorporated into the final policy design. The proposed changes are as follows: — Pensions – the pension contributions for existing Executive Directors will be reduced over the next three years to align with the average wider workforce rate for existing UK employees at 17% of salary. For any newly appointed Executive Directors, the pensions contribution will be 12%, in line with the new hire rate for the wider UK workforce. — Shareholding requirements – a post-employment shareholding requirement will be introduced to retain the lower of the shareholding requirement and actual shareholding at leaving date (based on shares vesting following the introduction of the new policy) at 100% in year one and 50% in year two. — Malus and clawback – additional triggers added. — Recruitment – flexibility to increase the maximum bonus to 200% (from 180%) for newly appointed Executive Directors where required to secure the right talent. Whilst no changes are proposed to the current incentive metrics, the Committee consulted with shareholders on the possibility of introducing a metric based on environmental performance and other sustainability measures in the future, as this continues to be an important focus of future Group performance. In developing the policy, the Committee also reviewed remuneration across the wider workforce as context for any proposed changes.
Base salaries	Review of base salaries in accordance with the remuneration policy and the broader employee context.	The Committee reviewed the salary levels of the Executive Directors and concluded that no increases would be made in 2020.
Annual bonus	2019 bonus – review of performance against the 2019 bonus targets. 2020 bonus – review of measures and targets to ensure continued alignment to strategy.	Warren East and Stephen Daintith received a bonus of 52.5% of maximum. 40% of the awards were deferred into shares. The Committee agreed that for the 2020 bonus plan the same measures would apply as in 2019: — Profit – 25% — Cash – 50% — Customer satisfaction – 12.5% — Employee engagement – 12.5% Awards will be based 80% on Group performance and 20% on individual performance. The maximum opportunities remain at 180% of salary for the Chief Executive and 150% for other Executive Directors.
Long-term incentive plan	2017 LTIP – review of achievement of performance measures. 2020 LTIP – setting targets that ensure significant stretch.	The 2017 LTIP will mature in March 2020 at 53% of maximum. For 2020 grants, targets will continue to be based on CPS (60%), EPS (20%) and TSR (20%). The maximum opportunities remain at 250% of salary for the Chief Executive and 225% of salary for other Executive Directors.

REMUNERATION POLICY FROM 2020

Introduction

The policy will take effect from 7 May 2020, subject to shareholder approval at the AGM.

Key policy themes

In 2016, the Committee undertook a wide-ranging review of the remuneration policy, resulting in a number of changes under the themes of supporting transformation, talent, simplicity and stewardship. The Committee believes that these changes have been working well for the Company and remain relevant given that we are still in a period of transformation. As a result, the Committee has focused on three key themes for this review, evolving the existing policy with limited changes.

Alignment to vision and strategy

There is a continued focus on delivering an unprecedented level of transformation: reducing costs, delivering operational excellence, innovating new products and meeting customer expectations, including dealing with legacy engine issues. The Committee considered a number of alternative incentive measures such as CROIC and new technology milestones. However our main priority continues to be to significantly increase our cash flow generation to ensure that we can deliver sustainable value to our shareholders and invest in new technologies to drive our long-term success. It is therefore important that our incentive measures continue to reflect the significance of cash flow generation. Looking further ahead, the Committee recognises the importance of environmental performance and other sustainability measures and may consider this as a metric at some point in the future, as a key driver to business success.

Supporting the talent agenda

We must continue to be able to attract and retain the individuals who can drive our long-term business success across an increasingly global and diverse talent pool. The changes we made in the 2017 policy, which were cascaded further down the organisation, have helped with the recruitment of executive talent. However, we are increasingly experiencing a challenge in recruiting key talent from outside the UK at senior levels and need to ensure that we have as much flexibility as possible to make sure we can secure a talented and diverse workforce for the future.

Alignment with the Code

We recognise the importance of strong corporate governance around executive compensation and are proposing further changes to align with the Code around executive pensions, post-employment shareholding requirements and malus and clawback provisions.

Changes to policy design

Whilst the existing policy is working well for us, a small number of changes are proposed to our policy for 2020:

Recruitment

We are not proposing any changes to quantum for existing Executive Directors. Our current policy contains flexibility for a higher LTIP maximum of 300% of salary for new hires and we plan to retain this. In addition, for new hires, given the increasingly global, diverse executive talent pool we propose to increase the maximum bonus to 200% of salary (currently 180% for the Chief Executive and 150% for other Executive Directors) to give us additional flexibility to secure executive talent in the future. This will not be applied for current incumbents and will only be used for recruitment if needed.

Pensions

We will reduce the pension contribution for newly appointed Executive Directors from a maximum of 25% to 12% of salary to align with the new hire rate for the wider UK workforce.

The pension contributions for existing Executive Directors will be reduced over the period to 2022 to align with the average wider workforce rate for existing UK employees of 17% of salary.

Shareholding requirements

We will introduce a requirement for Executive Directors to retain the lower of their shareholding requirement or their actual holding at leaving date in full for 12 months from that date, based on shares vesting following the introduction of the new policy. The requirement will be 50% of this level in the second year.

Malus and clawback

We are adding further malus and clawback triggers to our requirements, to ensure that we have a robust set of triggers that are relevant and appropriate to our business.

Consideration of shareholder feedback

During the policy review we have engaged in constructive consultation with our largest shareholders which has reinforced our view that the current policy is working and is well supported. The overall feedback from this consultation was:

- recognition that business transformation continues to be the critical focus for the Group;
- agreement that cash generation remains the key financial driver;
- acknowledgement that environmental measures are becoming a key metric both internally and externally and that quantitative measures that are important to the business strategy might be an appropriate non-financial incentive measure in the future;
- understanding of the rationale for increasing the maximum bonus for new hires to support future talent needs if required; and
- support for changes to pensions, post-employment shareholding requirements and malus and clawback triggers.

These views have been reflected in the final policy design for 2020.

Summary of our revised remuneration policy

Fixed pay

- Base salary
- Benefits
- Pension

Variable pay

Annual bonus

80% Group performance + 20% individual performance

Financial
- Profit
- Cash

Non-financial
- Customer
- Employee engagement

40% deferral for 2 years

Long-term incentive plan

60% CPS | 20% EPS | 20% TSR

3-year performance period plus 2-year holding period

Malus and clawback – LTIP awards are subject to malus and clawback provisions where there has been a material misstatement of audited results; serious financial irregularity; material financial downturn or an event causing a material negative impact on the value of the Group; material failure of risk management; a serious breach of Our Code; individual misconduct or actions that materially damage the Group; a breach of or inadequate response to a significant HSE or other environmental issue; and/or materially incorrect calculation of an award. These provisions apply from the date of grant for six years. The same provisions apply to awards of deferred shares for three years from the date of grant.

Shareholding requirement – Executive Directors are required to work towards holding beneficially-owned shares equivalent in value to a percentage of their salary by retaining at least one half of after-tax shares released from the LTIP until this requirement is met. For the Chief Executive this requirement is 250% of salary and for other Executive Directors this requirement is 200% of salary. In addition, the lower of their shareholding requirement or their actual shareholding at leaving date must normally be retained by Executive Directors for 12 months following leaving date and then 50% of that amount for the following 12 months.

Element	Commentary
Fixed pay	No changes are proposed to the salary or benefits elements of the remuneration policy approved by shareholders at the 2017 AGM. Pension contributions will be reduced to align with the average of the wider UK workforce.
Annual bonus	Performance measures remain appropriate following the introduction of customer and employee metrics in 2016. Bonuses are determined primarily by Group financial performance but the Committee may apply non-financial metrics that support the underlying strategic priorities for the forthcoming year.
	Executive Director bonuses will continue to be awarded using a simple additive approach: — 80% of the award will be based on Group performance — 20% of the award will be based on individual performance The maximum for existing Executive Directors will be maintained at 180% of salary. The new remuneration policy includes the flexibility for a potential maximum of up to 200% of salary for newly hired Executive Directors. The intention is that this flexibility will only be used for recruitment to secure talent across a global and diverse pool.
	40% of any bonus will be deferred into shares for two years.
Long-term incentive plan	CPS, EPS and TSR remain our long-term measures of success and reflect the strategic focus on profitable growth, the quality of profit, and returns to shareholders. During shareholder consultations, we received strong support for the continued use of cash flow as the central measure of long-term performance.
	The two-year holding period following the three-year performance period continues. This includes a requirement to continue to hold shares after participants have left the Group. 20% of the maximum award will vest for threshold performance.
	The remuneration policy continues to include an overall maximum of up to 300% of salary for the Chief Executive and 250% for other Executive Directors. This flexibility will only be used for recruitment to secure talent across a global and diverse talent pool. The intended operational maximum for the three-year period of this policy will continue to be 250% of salary for the Chief Executive and 225% of salary for other Executive Directors.

Remuneration policy table

The table below sets out each element of Executive Directors' remuneration.

Pay element – fixed pay	
Base salary	
Purpose and link to strategy	The Company provides competitive salaries suitable to attract and retain individuals of the right calibre to develop and execute the business strategy.
Operation	Salaries are reviewed, but not necessarily increased, annually. Decisions on salary are informed but not led by reference to companies of a similar size, complexity and international reach.
Maximum opportunity	Any salary increases will be assessed annually and will not normally exceed average increases for employees in other appropriate parts of the Group. The Committee may exercise discretion to make larger increases in circumstances where it is necessary to address particular issues or risks, including growth in the role for new appointments.
Benefits	
Purpose and link to strategy	The Company provides competitive benefits suitable to attract and retain individuals of the right calibre to develop and execute the business strategy.
Operation	Benefits may include car or car allowance and related costs, financial planning assistance, private medical insurance, life assurance and other appropriate benefits at the discretion of the Committee. Relocation support or support for accommodation and travel may be offered to executives where necessary. Executive Directors may participate in all-employee share plans including ShareSave and the Share Incentive Plan.
Maximum opportunity	Benefits excluding all employee share plans, and any accommodation, relocation and associated tax costs will not exceed £100,000 per annum.
Pension	
Purpose and link to strategy	The Company provides competitive pension schemes suitable to attract and retain individuals of the right calibre to develop and execute the business strategy.
Operation	Executive Directors are offered membership of a defined contribution pension plan. A cash allowance may be payable in lieu of pension contributions.
Maximum opportunity	For incumbent Executive Directors, the maximum employer contribution to a defined contribution plan (or to be taken as a cash allowance) is currently 25% of salary. This will reduce to 17% of salary, the current average of the wider UK workforce, by March 2022. For newly appointed Executive Directors, the rate will be 12% of salary. Pensions contributions are based on base salary only.

Pay element – variable pay	
Annual bonus	
Purpose and link to strategy	To incentivise the execution of the business strategy, delivery of financial targets, and the achievement of personal objectives.
Operation	Bonuses are determined primarily by Group financial performance, but the Committee may apply non-financial metrics that support the underlying strategic priorities for the forthcoming year and/or adjust the payout level to ensure the outturns reflect performance. The bonuses payable are also linked to personal performance of the Executive Directors. 25% of the maximum opportunity is payable if base performance is achieved and 50% of maximum for target performance. The financial and non-financial metrics are set with reference to the prior year and to the budgets and business plans for the coming year, ensuring the levels to achieve base, on-target and maximum payout are appropriately stretching. At least 40% of the bonus is compulsorily deferred into shares for a further two years, and released subject to continued employment. Deferred shares may attract an issue of C Shares or equivalent during the deferral period. Awards are subject to malus and clawback provisions where there has been a material misstatement of audited results; serious financial irregularity; material financial downturn or an event causing a material negative impact on the value of the Group; material failure of risk management; a serious breach of Our Code; individual misconduct or actions that materially damage the Group; a breach of or inadequate response to a significant HSE or other environmental issue; and/or a materially incorrect calculation of an award. These provisions apply from the date of grant for three years. For awards granted prior to the adoption of this policy, legacy malus and clawback provisions may apply. The Committee has discretion to adjust the formulaic outcome (including down to zero) to ensure alignment of pay with performance and fairness for shareholders and participants.
Maximum opportunity	The normal annual maximum for the Chief Executive is 180% of salary and 150% for other Executive Directors. A maximum of 200% may be applied for recruitment where it is required to secure individuals with the right skills and experience. This flexibility would not be used for existing Executive Directors.
Performance measures	The bonus is weighted 80% on Group metrics, and 20% on individual performance. Within the Group metrics: — at least 60% is based on Group financial targets (for example profit and free cash flow) — up to 40% of the bonus is based on non-financial metrics such as employee engagement and customer — individual objectives are set and agreed with the Remuneration Committee at the start of each year, to reflect the prevailing business context — the Committee may, in the context of the underlying business strategy, use different performance measures
Long-term incentive plan (LTIP)	
Purpose and link to strategy	To reward the development and execution of the business strategy over a multi-year period.
Operation	Executive Directors are granted awards over shares annually with a three-year performance period. The number of shares relative to the proportion of the award that vests is determined at the end of the performance period according to the achievement against the performance measures. The resultant shares are then held for a further two-year period. 20% of the maximum award will vest for threshold performance. The Committee has discretion to adjust the formulaic outcome (including down to zero) to ensure alignment of pay with performance and fairness for shareholders and participants. Executive Directors are expected to work towards holding beneficially-owned shares equivalent in value to a percentage of their salary by retaining at least one half of after-tax shares released from the LTIP until this requirement is met (see page 100). Awards are subject to malus and clawback provisions where there has been a material misstatement of audited results; serious financial irregularity; material financial downturn or an event causing a material negative impact on the value of the Group; material failure of risk management; a serious breach of our Code; individual misconduct or actions that materially damage the Group; a breach of or inadequate response to a significant HSE or other environmental issue; and/or a materially incorrect calculation of an award. These provisions apply from the date of the award for six years. For awards granted prior to the adoption of this policy, legacy malus and clawback provisions may apply.

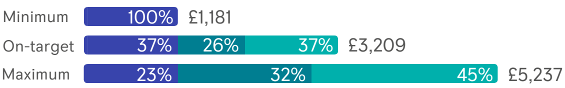
Pay element – variable pay	
Long-term incentive plan (LTIP) continued	
Maximum opportunity	Normal annual awards: — Chief Executive – 250% of salary — other Executive Directors – 225% of salary The maximum face value of annual awards is 300% of salary for the Chief Executive and 250% for other Executive Directors. This flexibility would only be used for recruitment to secure individuals with the required skills and experience. This flexibility would not be used in the normal course of business.
Performance measures	Performance measures may include CPS, EPS, TSR and/or sustainability measures, for example environmental performance measures and other similar measures that are important to the success of the business strategy. For 2020 awards, the measures will be weighted 60% CPS, 20% EPS and 20% TSR. No more than 20% of awards will vest for threshold performance. The Committee may, in the context of the underlying business strategy, use different performance measures and/or vary the weightings of the measures.

The table below sets out the main elements of Non-Executive Directors' remuneration.

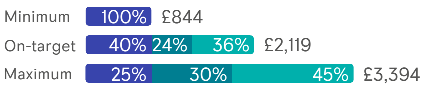
Pay element	
Fees	
Purpose and link to strategy	To reward individuals for fulfilling their role and attract individuals of the skills and calibre required.
Operation	The Committee makes recommendations to the Board on the Chairman's remuneration. The Chairman and the Executive Directors determine the remuneration of the Non-Executive Directors. Levels take into account fees paid by other companies of a similar size and complexity. The Chairman is paid a single fee. Other Non-Executive Directors are paid a base fee covering Board and Board committee membership, with committee chairmen, the Senior Independent Director and the Employee Champion receiving an additional fee.
Maximum opportunity	The maximum total remuneration payable to Non-Executive Directors, including the Chairman, is £1,600,000 per annum.
Benefits	
Purpose and link to strategy	To devote maximum time and attention to the requirements of the role.
Operation	The Chairman has occasional use of chauffeur services. Travel, hotel and subsistence incurred in attending meetings are reimbursed by the Company. The Group may pay tax on such benefits. It may provide support with tax matters for Non-Executive Directors based outside the UK.
Maximum opportunity	Maximum value for chauffeur services will not exceed £15,000 per annum. £5,000 maximum towards tax advice and filing per annum.

Remuneration policy – worked examples for 2020

Chief Executive £000



Chief Financial Officer £000



■ Fixed remuneration (including salary, benefits and pension)
■ Annual bonus
■ LTIP (this does not include share price growth)

Minimum – fixed remuneration (salary, pension, benefits), no bonus award or LTIP vesting.
On-target – fixed remuneration, 50% of maximum bonus award, 50% of LTIP vesting.
Maximum – fixed remuneration, 100% of maximum bonus award, 100% of LTIP vesting.
Maximum assuming 50% growth in share price would be £6,417k for the Chief Executive and £4,159k for the Chief Financial Officer.

Performance measures and targets

The Committee will set Group financial targets for annual bonus and LTIP awards with reference to the prior year and to forward-looking business forecasts, ensuring the levels of performance required to achieve base, on-target and maximum bonus awards are appropriately challenging.

The Committee may, in the context of the underlying business strategy, use different performance measures for incentives and/or vary the weightings of the measures. For example, looking ahead the Committee recognises the importance of environmental performance and other sustainability measures to the success of the business strategy and may wish to include such quantitative measures in the incentive plans. Feedback would be sought from shareholders if the Committee wished to apply this to the LTIP within the three-year period of this policy.

The measurement of performance against performance targets is at the Committee's discretion, which may include appropriate adjustments to financial or non-financial elements and/or consideration of overall performance in the round. Adjustments may be either upwards or downwards.

Performance conditions may also be replaced or varied if an event occurs or circumstances arise which cause the Committee to determine that the performance conditions have ceased to be appropriate. If the performance conditions are varied or replaced, the amended conditions must, in the opinion of the Committee, be fair, reasonable and materially no less difficult than the original conditions when set.

Policy on new appointments

The Committee will appoint new Executive Directors with a package that is in line with the remuneration policy. Base salary may be set at a higher or lower level than the previous incumbent. The Committee may use its discretion to make individual incentive awards up to the maximum policy headroom limits outlined in the policy table.

Remuneration forfeited on resignation from a previous employer may be compensated. This will be considered on a case-by-case basis and may comprise cash or shares. In general:

- if such remuneration was in the form of shares, compensation will be in the Company's shares.
- if remuneration was subject to achievement of performance conditions, compensation will be normally be subject to performance (either Rolls-Royce performance conditions or actual/forecast performance outturns from the previous company); and
- the timing of any compensation will, where practicable, match the vesting schedule of the remuneration forfeited.

Legacy terms for internal appointments may be honoured, including any outstanding incentive awards. If an Executive Director is appointed following a merger or an acquisition of a company by Rolls-Royce, legacy terms and conditions may be honoured.

Wider workforce considerations

When setting remuneration for Executive Directors and the senior management team, the Committee carefully considers wider remuneration across the Group, including salary increases, bonus awards, share plan participation and pay ratios between Executive Directors and other employees.

During 2019, the Committee held an additional in-depth review session to develop a deeper understanding of demographics across the organisation, the differences in total reward across various employee groups and geographies and key areas of focus on culture and reward. As a result, the Committee will continue to review this information on a more regular basis to help inform its decisions on executive pay.

At more senior levels, remuneration is increasingly long-term and larger proportions are dependent on Group and business performance, as well as individual performance and a larger proportion is delivered in the form of shares. In terms of the management population generally, the direction of travel is to re-balance the total reward package from fixed elements to variable performance-related elements.

We are committed to sharing business success across the organisation, with all employees participating in a short-term incentive plan. There is strong alignment of business metrics between the Executive Directors bonus plan and those in which the majority of the workforce participate. In addition, the Group offers an all-employee sharesave plan to eligible employees globally every two years which aligns employee interests with those of our shareholders. This continues to be a popular benefit with over 40% of employees joining the most recent plan.

The broader workforce has not had direct input into the proposed policy but its application is strongly influenced by remuneration arrangements for all employees. Irene Dorner, who has designated responsibility for engaging with employees and bringing their voice into the boardroom, is now the Chairman of the Remuneration Committee, which further strengthens the link between employees and executive remuneration.

Share plans

The Committee retains a number of discretions consistent with the relevant share plan rules. In the event of any variation in the share capital of the Company, a demerger, special dividend, distribution or any other transaction which will materially affect the value of shares, the Committee may make an adjustment to the number or class of shares subject to award.

The treatment of leavers in our ShareSave and the Share Incentive Plan is covered by the respective plan rules. Change of control provisions in respect of employee share plans are set out on page 207.

Termination

The Company is required to give Executive Directors 12 months' notice under their service contracts. Payment in lieu of notice will not exceed the value of 12 months' salary, benefits and pension contributions. Both mitigation and the timing of payments through the notice period will be considered by the Committee where appropriate, as will the funding of reasonable outplacement and other professional fees. There is no automatic entitlement to an annual bonus. Taking into account the circumstances, the Committee has discretion to award a bonus in respect of performance in the financial year with appropriate consideration of time pro-rating.

Deferred shares will generally be released in cases such as retirement, death, injury, ill-health, redundancy or any other reason at the discretion of the Committee. In these cases any annual bonus awarded immediately prior to leaving may be delivered in cash rather than deferred shares.

For the LTIP, the rules state that unvested awards may be preserved at the Committee's discretion according to the circumstances. In such cases vesting will be at the normal date, subject to the established performance conditions, and pro-rated to employment in the performance period. In cases such as death and terminal illness, the Committee also has the discretion to vest the awards immediately using an estimate of future outturn. If an individual leaves after the LTIP shares have vested but during the holding period, shares will not be forfeited but the holding period will remain in force. The Committee also has the discretion to mitigate or clawback awards where an Executive Director retires and then becomes employed or engaged by another business in a non-voluntary capacity within 12 months.

Post-employment

Post-employment, an Executive Director will normally be required to retain the lower of their shareholding requirement or their actual shareholding at leaving date (based on shares vesting following the introduction of the new policy) for one year after leaving, and 50% of this level for a second year. The Committee can waive or modify this requirement (for example in compassionate circumstances).

Service contracts

The service contract for Warren East, includes 12 months' notice of termination from the Company and six months' notice from the Executive Director. The service contracts of Stephen Daintith, and any new appointee, will include 12 months' notice from the Company and 12 months' notice from the Executive Director. All contracts include the entitlement to paid holidays, sick pay, and other standard employment terms including reimbursement of reasonable business expenses.

The Chairman and Non-Executive Directors have letters of appointment. No compensation is payable to the Chairman or to any Non-Executive Director if the appointment is terminated early or if they fail to be re-elected at an AGM.

Legacy commitments

Any remuneration payments and/or payments for loss of office made under legacy arrangements prior to the approval of the Company's remuneration policy may be paid out subject to the terms of the remuneration policy in place at the time they were agreed. For these purposes, 'payments' include the Company satisfying awards of variable remuneration and, in relation to an award over shares, the terms of the payment are agreed at the time the award is granted.

Minor amendments

The Committee may make minor amendments to the policy (for regulatory, exchange control, tax or administrative purposes or to take account of a change in legislation) without obtaining shareholder approval.

Section 40 disclosures

When developing the proposed remuneration policy and considering its implementation for 2020, the Committee was mindful of the Code and considers that the executive remuneration framework appropriately addresses the following factors:

Clarity	We provide open and transparent disclosures regarding our executive remuneration arrangements. We have explained the changes to our proposed remuneration policy in a way that highlights their alignment to both our vision and strategy as well as the provisions of the Code.
Simplicity	Remuneration arrangements for our Executives and our wider workforce are simple in nature and well understood by both participants and shareholders.
Predictability	Our remuneration policy contains details of maximum opportunity levels for each component of pay, with actual incentive outcomes varying depending on the level of performance achieved against specific measures.
Proportionality, risk, and alignment to culture	The metrics used to measure performance for annual bonus and LTIP awards drive behaviours that are closely aligned to our vision and strategy. In particular our variable pay arrangements continue to focus on delivering an unprecedented level of transformation. The Committee considers that our variable pay structures do not encourage inappropriate risk-taking. The annual bonus and the LTIP are subject to the achievement of stretching performance targets, and the Committee's holistic assessment of performance that can result in the application of discretion. The use of annual bonus deferral, LTIP holding periods and our shareholding requirements (including after leaving employment with Rolls-Royce) provide a clear link to the ongoing performance of the business and therefore alignment with shareholders. Malus and clawback provisions also apply for both the annual bonus and LTIP.

Executive Directors' remuneration

The following pages show how we have applied our remuneration policy during 2019 and disclose all elements of remuneration received by our Executive Directors. Details of remuneration received by our Non-Executive Directors during 2019 can be found on pages 103 and 104.

Executive Directors' single figure of remuneration (audited)

	Salary (a)[1] £000		Benefits (b) £000		Bonus (c) £000		Long-term incentives (d)[2,3] £000		Pension (e) £000		Total remuneration £000	
	2019	2018	2019	2018	2019	2018	2019	2018 restated	2019	2018	2019	2018
Executive Directors												
Warren East	944	944	17	17	883	1,012	1,079	1,866	236	236	3,159	4,075
Stephen Daintith	680	680	20	19	530	608	714	1,770	150	150	2,094	3,227

1 Neither Warren East nor Stephen Daintith received a salary increase in 2019. The last increase made to Warren East was in September 2017.
2 The average share price for the three months to 31 December 2019 of 722p has been used to calculate the LTIP value (as the actual value is not known at the date of signing this report). The 2018 long-term incentive value has been updated from the 2018 Annual Report. This value is now based on the share price on vesting on 1 March 2019 of 909p.
3 There is no share appreciation reflected in the 2018 LTIP values as the share price has reduced since the grant date.

a) Salary

The Company provides suitable competitive salaries to attract and retain individuals of the right calibre to develop and execute the business strategy. The Committee reviewed the salaries of Warren East and Stephen Daintith in early 2020 and agreed there would be no increases for 2020.

Executive Director	Base salary as at 1 March 2020	Base salary as at 1 March 2019
Warren East	£943,500	£943,500
Stephen Daintith	£680,000	£680,000

b) Executive Directors' benefits (audited)

Benefits are provided to ensure that remuneration packages remain sufficiently competitive to attract and retain individuals of the right calibre to develop and execute the business strategy and to enable them to devote themselves fully to their roles. The taxable value of all benefits paid to Executive Directors during 2019 is shown below.

	Car or car allowance inc. fuel allowance £000		Medical insurance £000		Travel and subsistence £000		Total £000	
Executive Directors	2019	2018	2019	2018	2019	2018	2019	2018
Warren East	15	15	1	2	1	–	17	17
Stephen Daintith	17	17	2	2	1	–	20	19

c) Annual bonus outturn (audited)

The Company's annual bonus scheme is designed to incentivise the execution of the business strategy, delivery of financial targets and the achievement of personal objectives. Executive Directors receive any annual bonus awarded in March following the performance period. 60% of the bonus is paid in cash with the remaining 40% awarded in deferred shares. Deferred shares are held in trust for two years before being released, subject to the recipient still being employed by the Group and include the right to receive an amount equal in value to the C Shares issued during the deferral period. The annual maximum for the Chief Executive is 180% of salary and 150% for the other Executive Director(s):

— 80% of the award is based on Group performance

— 20% of the award is based on individual performance

c) Annual bonus outturn (audited) continued

The Committee reviewed the 2019 outturn against the performance measures; 80% of annual bonus is based on Group performance and 20% is based on individual performance. The Group performance measures are shown below:

	Profit	Cash	Customer metric [1]	Employee engagement [2]	Total
Weighting	25%	50%	12.5%	12.5%	100%
Base (25%)	£334m	£610m		3.59/3.58	
Target (50%)	£434m	£760m	measured as the average of the business scorecards (see below)	3.68/3.61	
Maximum (100%)	£634m	£1,060m		3.91/3.65	
2019 performance [3]	£628m	£866m	38%	3.56/3.52	
% of maximum	98%	68%	19%	0%	61%
Adjusted % of maximum					52.5%

[1] Customer metric is measured on the average of the business scorecards (see below).
[2] In 2019, a new survey, Gallup Q12, was introduced to measure employee engagement. There were two surveys in 2019, the first weighted at 25% and the second at 75% of the overall metric. Power Systems employees only participated in the second survey.
[3] Adjusted to exclude ITP Aero, non-core businesses, FX, exceptional items, the impact of accounting effects and unbudgeted items.

The Committee retains overriding discretion on the outturns of the annual bonus and chose to apply that discretion to reduce the 2019 outturns. In assessing the final bonus awards, the Committee considered a number of factors, particularly Trent 1000, as well as HSE performance, quality of financial performance and the experience of customers and shareholders. The Committee exercised discretion to reduce the overall bonus outturn from 61% to 52.5%.

Definitions used for performance measures:

Profit – adjusted underlying profit before tax for 2019.

Cash – free cash flow which is cash flow before acquisitions and disposals, shareholder payments and foreign exchange.

Customer metric – Group performance is assessed using an index score based on the average outcome of bespoke customer metrics for each of Civil, Power Systems and Defence. This approach means that each business focuses on the most meaningful customer metrics. See page 15 for more information. The customer metrics for each business are below:

Civil Aerospace – OE delivery to purchase order, TotalCare engine availability, CorporateCare engine availability, Trent 1000 aircraft on ground (AOG).

Power Systems – OE delivery to purchase order, spares delivery to purchase order, claims per unit, time to solve.

Defence – OE delivery to purchase order, spares delivery to purchase order, engine availability, submarines composite delivery.

The specific business targets are commercially sensitive.

Employee engagement – Is measured through our annual engagement survey. In 2019, we introduced a new employee opinion survey, in partnership with Gallup. We ran two surveys this year to embed the new approach and weighted the first survey at 25% of the bonus metric and the second at 75%. 58% of employees completed the first survey and 72% completed the second survey. We achieved a Group score of 3.56 for the first survey and 3.52 for the second resulting in a weighted average of 3.53.

Individual performance

Executive Directors have 20% of their bonus based on achievement of their personal objectives. Personal performance objectives are set at the beginning of the year and are aligned with the Group's internal strategic priorities.

For Executive Directors, these have included:

- deliver Group revenue, profit and cash, in line with the budget, with specific focus on cash costs and free cash flow;
- accelerate progress on diversity and HSE against agreed objectives and metrics;
- drive M&A disposals, in particular ensuring a successful completion of the Commercial Marine disposal;
- continue to drive the Group restructuring programme, delivering a further 1,500 in headcount reductions and a run rate of £300m by the end of 2019;
- drive performance through our values and behaviours, leading by example with a strong focus on safety, diversity & inclusion and the highest ethical and professional standards; and
- fix the fleet – manage the legacy engine issues effectively to rebuild trust and confidence with our customers.

The Committee assesses performance against the objectives. The overall assessed percentage is based on the Committee's judgement and may include other factors and achievements in the year.

The following provides an overview of key achievements during the year for each Executive Director:

Warren East	Stephen Daintith
Delivered business performance ahead of budget on profit and cash with enhanced quality of cash driven by cost control and operational improvements. Healthy growth in Power Systems revenue against a weak market and Defence record backlog. 64% new widebody orders achieved in Civil Aerospace. Increased profitability in all businesses.	Delivered on all areas of financial guidance for 2020; revenues, margins, profit and cash flow.
Majority of Trent 1000 issues addressed and roll out into the fleet in progress. Doubled MRO output in 2019, with further capacity increase in progress.	Fundamental improvement in cash flow with strong free cash flows delivered in 2019 and a clear roadmap to at least £1bn in 2020.
Further management change across all businesses and functions. Group Business Services function established delivering 9% cost reduction in year one. On track to meet targets announced in June 2018.	Successful disposals of non-core assets (Commercial Marine, North America Civil Nuclear business) with proceeds retained to strengthen the balance sheet. Average net debt has reduced from £1.3bn in 2018 to circa £0.7bn in 2019.
TRI improvement in Civil Aerospace, Power Systems and Defence. Gender diversity strongly improving amongst senior management and in succession plans at most levels. ELG moving from 15% female in 2018 to 20% in 2019.	Finance systems and management information transformation continued with the introduction of an integrated driver-based budgeting and forecasting tool to improve planning.
Further balance sheet improvements through completion of non-core asset sales. Improved free cash flow, continuing to drive down net debt.	Restructuring programme progressed in line with expectations with circa 2,900 cumulative headcount reduction and run-rate savings so far of £269m, C&A costs reduced 5% year-on-year, capital expenditure reduced year-on-year by more than £200m.
Within flat overall R&D cost, shifting the balance towards future-looking, zero carbon technologies, alongside progress on next generation gas turbines. Acquisition of Siemens' eAircraft business and investment in microgrids to accelerate electrical capability. Establishing industry leadership position in lower carbon technologies.	

2019 annual bonus outturn (to be paid in March 2020)

	Group performance (% of maximum)	Individual performance (% of maximum)	Total bonus (% of maximum)	Total bonus (% of salary)
Warren East	53%	50%	52%	94%
Stephen Daintith	53%	50%	52%	78%

d) Long-term incentives (audited)

Conditional share awards are made to Executive Directors under the LTIP to reward the execution and development of the business strategy over a multi-year period. The conditional shares are then subject to a further two-year holding period.

LTIP awards made in March 2019

The performance targets for awards made in March 2019 are shown below. Performance will be measured over three years to 31 December 2021.

	CPS (60%)	EPS (20%)	Relative TSR (20%)
Threshold (20% vesting)	112p	81p	Median
Mid (50% vesting)	150p	95p	Between median and upper quartile
Maximum (100% vesting)	187p	109p	Upper quartile

	Number of shares	% of salary	Face value of award [1] £000	Performance period end date
Warren East	264,532	250	2,359	31 December 2021
Stephen Daintith	171,589	225	1,530	31 December 2021

[1] Calculated as 250% of salary for Warren East and 225% of salary for Stephen Daintith, divided by share price at date of grant of 891.57p per share.

2017 LTIP awards

The following sets out details in respect of the May 2017 LTIP award for which the final year of performance was the 2019 financial year. The performance conditions were assessed to the end of 2019 and the shares are then subject to a two-year holding period.

	Weighting	Threshold (20% vesting)	Mid (50% vesting)	Maximum (100% vesting)	Performance achieved	Vesting as a % of maximum
CPS [1]	60%	57p	76p	104p	87p	69.6%
EPS [2]	20%	3p	23p	48p	26p	56.0%
Relative TSR v FTSE 100 constituents	10%	Median		Upper quartile	Below median	0%
Relative TSR v constituents of the S&P Global Industrials index	10%	Median		Upper quartile	Below median	0%
						Total vesting of 53%

1 CPS ranges were adjusted to reflect M&A activity in line with the plan definition. The original targets were minimum 60p; mid 80p; maximum 110p.
2 Over the performance period of the LTIP award the Company was required to change from accounting under IAS 18 to IFRS 15. This had a significant effect on reported profit and EPS. The targets were set on the basis of IAS 18 and, as communicated at the time of the grant, these targets have been restated so that they can be measured on an IFRS 15 basis. The translation has been on a like-for-like basis, applying the absolute cumulative profit growth in the original IAS 18 targets to the restated 2017 IFRS 15 target.

e) Pension entitlements (audited)

Executive Directors are offered membership of a defined contribution plan. A cash allowance may be payable in lieu of pension contributions.

From 2020, any newly appointed Executive Directors will be offered an employer contribution of 12% of salary into the defined contribution pension plan (or cash allowance of equivalent value). This aligns to the new hire rate for the UK workforce.

In terms of existing Executive Directors, Warren East receives a cash allowance of 25% of salary and Stephen Daintith 22% of salary. During 2019 the Company embarked on a consultation exercise with UK managers in its legacy defined benefit plan (which has been closed to new members since 2007), to reduce future benefits from that plan. In the context of the reductions in pension benefits for that population, both Stephen and Warren have agreed that their cash allowances should also reduce. The following reductions have therefore been agreed with the Committee to a rate of 17% in 2022:

	Warren East	Stephen Daintith
Current pension allowance	25%	22%
Proposed change from 1 March 2020	23%	21%
Proposed change from 1 March 2021	20%	19%
Target level by 1 March 2022	17%	17%

In arriving at the 17% contribution rate for existing Executive Directors we have considered our UK population, which represents the largest employee group. Currently almost half of our UK workforce (45%) are active members of our defined benefit plan with a funding cost in excess of 30% of salary (based on the most recent funding valuation in March 2017). Given current financial market conditions, we would expect that cost to increase by the time of the next valuation in March 2020. Our defined contribution employer contribution rate is 12%, which we now offer to all new hires in the UK.

As we have such a significant proportion of our UK workforce in a defined benefit plan, we have reviewed the average blended contribution rate across all UK employees, which currently gives an average of 17% of salary. We believe that this is currently a fair reflection of the pension arrangements of the wider workforce. However, to reflect funding costs of defined benefit pensions and the proportion of employees in the defined benefit and defined contribution plans, we plan to keep this rate under review.

Other (audited)

Payments to past directors

An agreement was put in place between the Company and Colin Smith in 2017, for Colin to represent the Company in an ambassadorial capacity. The agreement was for up to 21.5 days for the latter part of 2017, 35 days for 2018 and 2019. This agreement has been extended for 2020 for up to 20 days. Total payments of £159,360 have been made under this agreement, of which £45,360 was paid in 2019.

Implementation of remuneration policy in 2020 *

Base salary	There will be no change to base salary for 2020; base salaries remain as: Warren East – £943,500 Stephen Daintith – £680,000
Benefits	There will be no change to our approach to benefits in 2020, which includes car or car allowance, financial planning assistance, insurances and other benefits.
Pensions	Pension cash allowances for existing Executive Directors will be reduced as follows from 1 March 2020: — Warren East – 23% (reduced from 25%) of salary — Stephen Daintith – 21% (reduced from 22%) of salary Further reductions will be made in 2021 and 2022 to bring both allowances to 17%.
Annual bonus	For 2020, bonuses will continue to be awarded using a simple additive approach: — 80% of the award will be based on Group performance — 20% of the award will be based on individual performance For 2020, the Group measures and weightings will be unchanged: profit (25%); free cash flow (50%); customer (12.5%); and employee engagement (12.5%). Operating profit will however be used as the profit measure rather than profit before tax, to better align our incentive targets with underlying business performance and to maintain consistency with external guidance. Targets are commercially sensitive and will be disclosed following assessment of performance. Maximum opportunities will remain unchanged: — Chief Executive – 180% of salary — Other Executive Directors – 150% of salary
LTIP awards	For awards to be granted in 2020 performance measures will be weighted: — 60% on CPS — 20% on EPS — 20% on relative TSR (versus FTSE 100 and Global S&P Index, to recognise that Rolls-Royce is a global company) Performance will be measured over three years to 31 December 2022. Performance targets will be:

	CPS	EPS IFRS 15 basis	Relative TSR
Threshold (20% vesting)	162p	85p	Median
Mid (50% vesting)	203p	106p	Between median and upper quartile
Maximum (100% vesting)	244p	127p	Upper quartile

Performance below threshold will result in that element lapsing in full.
The above targets are not an indication of forecast numbers for the three-year period.

Methodologies

CPS – Calculated as reported cash flow before the cost of business acquisitions or proceeds of disposals, foreign exchange translation effects, special payments into pension schemes and payments to shareholders, divided by the weighted average number of shares in issue. CPS is cumulative over a three-year period. The Committee will review CPS performance to ensure that it is a fair reflection of achievements over the period.

EPS – Calculated as cumulative absolute underlying EPS over the three-year performance period on an IFRS 15 basis.

Relative TSR – Measured 50% against the constituents of the FTSE 100 and 50% against the constituents of the S&P Global Industrials index.

Award sizes for maximum performance

— Chief Executive: 250% of salary
— Other Executive Directors: 225% of salary

Threshold vesting at 20% equates to 50% of salary for the Chief Executive and 45% of salary for other Executive Directors. LTIP awards will be subject to an additional holding period of two years following the three-year performance period.

* Subject to approval by shareholders at the 2020 AGM.

Other information

Executive Directors' share interests (audited)

The Directors and their connected persons hold the following interests in the ordinary shares of the Company:

	Ordinary shares		Conditional shares not subject to performance conditions (deferred share bonus)	Conditional shares subject to performance conditions (PSP)	Conditional shares subject to performance conditions (LTIP)	Options over shares subject to savings contract (ShareSave)
	31 December 2019	27 February 2020	31 December 2019	31 December 2019	31 December 2019	31 December 2019
Warren East	185,208	185,208	99,697	–	821,569	1,264
Stephen Daintith	189,068	189,068	53,961	–	536,568	925

Executive Directors' interests in vested and unvested share awards (audited)

Warren East	31 December 2018	Granted during the year	Vested awards	Lapsed awards	31 December 2019	Market price at date of award (p)	Date of grant	Vesting date/ lapse date	Market price at vesting (p)
PSP 2016 [1]	164,202	–	205,253	–	–	676.00	01/03/16	01/03/19	909.00
Total	**164,202**	**–**	**205,253**	**–**	**–**				
LTIP 2017	281,954	–	–	–	281,954	820.17	05/05/17	05/05/20	–
LTIP 2018	275,083	–	–	–	275,083	857.47	08/03/18	08/03/21	
LTIP 2019	–	264,532	–	–	264,532	891.67	15/03/19	15/03/22	–
Total	**557,037**	**264,532**		**–**	**821,569**				
Deferred share bonus (2016)	47,398	–	47,398	–	–	772.83	01/03/17	01/03/19	–
Deferred share bonus (2017)	53,641	–	–	–	53,641	857.47	08/03/18	01/03/20	–
Deferred share bonus (2018)	–	45,376	–	–	45,376	891.67	15/03/19	01/03/21	–
Total	**101,039**	**45,376**	**47,398**	**–**	**99,017**				
ShareSave (options) [2]	1,264	–	–	–	1,264	616.80	12/10/15	01/02/21	–

Stephen Daintith	31 December 2018	Granted during the year	Vested awards	Lapsed awards	31 December 2019	Market price at date of award (p)	Date of grant	Vesting date/ lapse date	Market price at vesting (p)
PSP 2017 (buy-out award) [1,3]	70,027	–	91,036	–	–	754.70	05/05/17	01/03/19	909.00
PSP 2017 (buy-out award) [1,3]	79,726	–	103,644	–	–	754.70	05/05/17	31/10/19	711.00
Total	**149,753**	–	**194,680**	–	**–**				
LTIP 2017	186,547	–	–	–	186,547	820.17	05/05/17	05/05/20	–
LTIP 2018	178,432	–	–	–	178,432	857.47	08/03/18	08/03/21	–
LTIP 2019	**–**	171,589	–	–	171,589	891.67	15/03/19	15/03/22	–
Total	**364,979**	**171,589**	–	–	**536,568**				
Deferred share bonus (2017)	26,374	–	–	–	26,374	857.47	08/03/18	01/03/20	–
Deferred share bonus (2018)	–	27,253	–	–	27,253	891.67	15/03/19	01/03/21	–
Total	**26,374**	**27,253**	–	–	**53,627**				
ShareSave (options) [2]	925	–	–	–	925	758.40	13/10/17	01/02/21	–
ShareSave (options) [2]	–	292	–	–	292	676.50	16/10/19	01/02/23	–

1 The 2016 PSP (which vested in March 2019) included a kicker for above median TSR performance, which generated a multiplier of 1.4 x the original grant value. As disclosed at the time, this multiplier was capped for the 2016 grants, the awards vested at 150% of salary for Warren East and 130% of salary for Stephen Daintith's buy-out awards that were tied to this plan.
2 For ShareSave, the price shown is the exercise price which was 85% of the market price at the date of the award.
3 The grant price for PSP awards made to Stephen Daintith was the average closing mid-market price calculated over one month, up to 22 September 2016 (the date that his appointment to Rolls-Royce was announced).

Shareholding requirement (audited)

Executive Directors are required to work towards holding beneficially-owned shares equivalent in value to a percentage of their salary by retaining at least one half of after-tax shares released from the LTIP until this requirement is met. For the Chief Executive this requirement is 250% of salary and for other Executive Directors this requirement is 200% of salary. The current shareholdings, as a percentage of salary, for Warren East and Stephen Daintith are 183% and 232% respectively*.

As a result of the policy review, an additional requirement has been added to the shareholding policy which requires Executive Directors to retain the lower of their shareholding requirement (based on shares vesting following the introduction of the new policy) at the date of leaving for one year after leaving and 50% of this level for a second year*.

* The percentage of the requirement was calculated by reference to the average share price, over the three months to 31 December 2019, and salary as at the date of the last grant on 15 March 2019. Unvested LTIP awards and ShareSave options are not included in this calculation.

Pay across the organisation

This section of the report enables our remuneration arrangements to be seen in context by providing:

— a comparison of the year-on-year percentage change in our Chief Executive's remuneration with the change in average remuneration across the UK;

— a year-on-year comparison of the total amount spent on employment costs across the Group and shareholder payments;

— a ten-year history of our Chief Executive's remuneration;

— our TSR performance over the same period; and

— an indication of the ratio between our Chief Executive's remuneration and the remuneration of employees.

Percentage change in Chief Executive remuneration

The following table compares the percentage change in the Chief Executive's salary, bonus and benefits (excluding LTIP) to the average percentage change in salary, bonus and benefits for all UK employees from 2018 to 2019.

Change in remuneration

	Salary	Benefits	Annual bonus
Chief Executive	0%	0%	(13)%
UK employees average [1]	3.38%	18.74%	14.83%

[1] UK employees were chosen as a comparator group in order to avoid the impact of exchange rate movements over the year. UK employees including apprentices, graduates and interns, make up 45% of the total employee population. The increase in benefits in the year is due to implementation of a standardised career framework across our management population. The increase in bonus is due to a higher bonus level particularly in Civil Aerospace which accounts for a large proportion of the UK workforce.

Chief Executive pay ratio

The Committee is mindful of the relationship between the remuneration of the Chief Executive and the wider employee population. This is the third year that we have published our CEO pay ratio and we have continued to use method A, as we believe that this is the most accurate and robust methodology. We have used the full time equivalent total remuneration of all UK employees at 31 December 2019.

Year	Method	25th percentile	Median	75th percentile
Total Remuneration [1]				
2019	**Option A**	**66:1**	**56:1**	**48:1**
2018	Option A	92:1	77.1	72:1
2017 [2]	n/a	n/a	41:1	n/a

[1] In 2018, we also calculated the ratio based on average salary at 21:1. Using the same basis in 2019, this increased to 22:1.
[2] The 2017 ratio was calculated prior to the regulations being issued and so was not fully aligned to the current approach.

The elements used to calculate the ratio comprise pay, benefits, pensions, bonuses and long term incentives. The numbers used in the calculations are as follows:

Year	25th percentile	Median	75th percentile
Salary	**£36k**	**£44k**	**£53k**
Total Remuneration	£48k	£56k	£65k

The pay ratio has reduced this year due to incentive outcomes for Warren East being lower in 2019 than in 2018. 2019 is also the first year that the new LTIP plan introduced in 2017 vested. The majority of other participants in this plan had a mixture of conditional shares with no performance conditions and performance shares. The vesting level for that population is therefore higher.

As outlined on page 93, the Committee has considered the wider workforce context in terms of alignment of total reward or the Executive Directors, with the pension changes being one such example from 2019.

All employees participate in a bonus plan, with a good degree of alignment of financial measures with the executives' bonus plan. We also encourage all eligible employees to join our ShareSave plan. For our most recent launch in 2019 approximately 40% of our global population joined the plan, sharing in approximately 14 million shares and stock appreciation rights.

Relative importance of spend on pay

The following chart sets out the percentage change in payments to shareholders and overall expenditure on pay across the Group.

Payment to shareholders (£m) *

(Consolidated Cash Flow statement)

* Value of C Shares redeemed during the year

Group employment costs (£m)

(Note 8 – employee information)

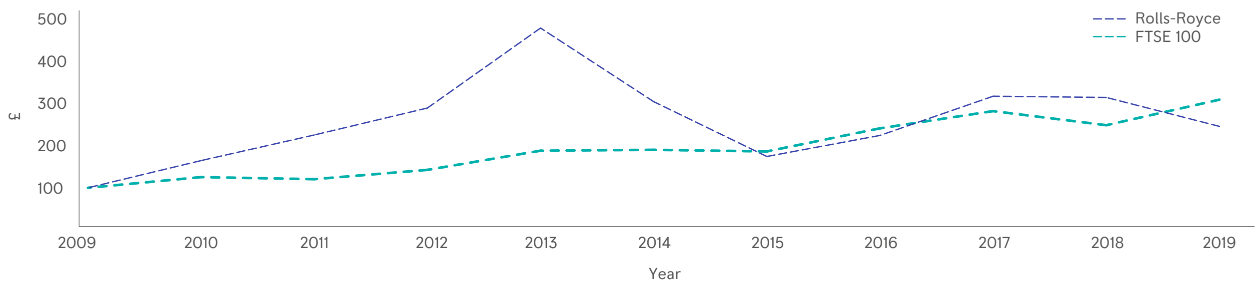
Chief Executive pay

Year	Chief Executive [1]	Single figure of total remuneration £000	Annual bonus as a % of maximum	LTIP as a % of maximum
2019	Warren East	3,159	52	53
2018	Warren East	4,075	60	100
2017	Warren East	2,331	68	–
2016	Warren East	2,089	55	–
2015	Warren East	543	–	–
2015	John Rishton	754	–	–
2014	John Rishton	2,596	–	45
2013	John Rishton [2]	6,228	55	100
2012	John Rishton [2]	4,577	85	–
2011	John Rishton	3,677	63	–
2011	Sir John Rose [3]	3,832	–	75
2010	Sir John Rose [3]	3,914	100	100

[1] On 31 March 2011, Sir John Rose retired and John Rishton was appointed. John Rishton retired on 2 July 2015 and Warren East was appointed as Chief Executive on 3 July 2015.
[2] John Rishton received a special grant of shares on joining the Company on 1 March 2011 to mirror the shares he forfeited on resigning from his previous employer. The share price had increased from 483.50p at the time this grant was made to 870p at the end of 2014. These are the main reasons why John Rishton's remuneration in 2012 and 2013 exceeded that of his predecessor.
[3] The remuneration for Sir John Rose does not include any pension accrual or contribution as he received his pension from 1 February 2008.

TSR performance

The Company's TSR performance over the previous ten years compared to a broad equity market index is shown in the graph below. The FTSE 100 has been chosen as the comparator because it contains a broad range of other UK-listed companies. The graph shows the growth in value of a hypothetical £100 holding in the Company's ordinary shares over ten years, relative to the FTSE 100 index.



Gender pay reporting

The Company is committed to creating a diverse and inclusive place to work where our people can be themselves and be at their best. More information about this can be found on pages 45 to 48. We published our UK gender pay gap in December 2019, which showed:

Median gender pay gap across all Rolls-Royce employees in the UK

Mean gender pay gap across all Rolls-Royce employees in the UK

Overall women currently represent 16% of our workforce. However, we continue to make progress in recruiting more women into senior positions, where 20% is now female. See pages 47 and 48 for further information on what we are doing to address diversity across the organisation.

Contractual arrangements

Each Executive Director has a service agreement that sets out the contract between that Executive Director and the Company.

Executive Directors' service contracts

	Date of contract	Notice period from Company	Notice period from individual
Warren East	21 April 2015	12 months	6 months
Stephen Daintith	21 September 2016	12 months	12 months

Payments received for serving on external boards

Executive Directors retain payments received from serving on the boards of external companies, the details of which are given below:

	Directorships held	Payments received and retained £000
Warren East	–	–
Stephen Daintith	3i Group plc	81

Non-Executive Directors' remuneration

Single figure of remuneration (audited)

	Fees (£000)		Benefits (£000)		Total remuneration (£000)	
Chairman and Non-Executive Directors	**2019**	2018	**2019**	2018	**2019**	2018
Sir Ian Davis	**425**	425	**3**	2	**428**	427
Lewis Booth	**95**	95	**40**	29	**135**	124
Ruth Cairnie (stepped down 31 December 2019)	**90**	90	**3**	3	**93**	93
Sir Frank Chapman	**90**	90	**3**	5	**93**	95
Irene Dorner	**85**	76	**1**	1	**86**	77
Beverly Goulet	**70**	70	**11**	7	**81**	77
Lee Hsien Yang	**70**	70	**40**	4	**110**	74
Nick Luff	**70**	46	**–**	–	**70**	46
Brad Singer (stepped down 9 December 2019)	**66**	70	**21**	6	**87**	76
Sir Kevin Smith	**105**	105	**2**	2	**107**	107
Jasmin Staiblin	**70**	70	**14**	10	**84**	80
Total	**1,236**	1,207	**138**	69	**1,374**	1,276

Non-Executive Directors' fees

The Chairman's fee is reviewed by the Board as a whole on the recommendation of the Committee. The review of the other Non-Executive Directors' base fees is reserved to the Executive Directors, who consider recommendations from the Chairman. No individual may be involved in setting his or her own fee. The Chairman and the Non-Executive Directors are not eligible to participate in any of the Group's share schemes, incentive arrangements or pension schemes. A facility is in place which enables Non-Executive Directors (who reside in a permitted dealing territory) to use some or all of their fees, after the appropriate statutory deductions, to make market purchases of shares in the Company on a monthly basis. Sir Ian Davis and Lee Hsien Yang use this facility.

Non-Executive Directors' fees

	2019 £000	2018 £000
Chairman	425	425
Other Non-Executive Directors base fee	70	70
Chairman of the Audit Committee	25	25
Chairman of the Remuneration Committee	20	20
Chairman of the Safety, Ethics & Sustainability Committee	20	20
Chairman of the Science & Technology Committee	20	20
Senior Independent Director	15	15
Employee Champion	15	15

Non-Executive Directors' benefits (audited)

The benefits for Non-Executive Directors relate predominantly to travel, hotel and subsistence incurred in attending meetings. For Non-Executive Directors based outside the UK, the Company may also pay towards tax advice and the cost of making tax filings.

Non-Executive Directors' share interests (audited)

The Non-Executive Directors and their connected persons hold the following interests in the ordinary shares of the Company:

Chairman and Non-Executive Directors	31 December 2019	27 February 2020
Sir Ian Davis	79,453	79,453
Lewis Booth	70,000	70,000
Ruth Cairnie (stepped down 31 December 2019)	19,927	n/a
Sir Frank Chapman	33,269	33,269
George Culmer (appointed 2 January 2020)	n/a	–
Irene Dorner	12,510	12,510
Beverly Goulet	9,360	9,360
Lee Hsien Yang	8,397	8,397
Nick Luff	10,000	10,000
Sir Kevin Smith	26,894	26,894
Jasmin Staiblin	–	–

Non-Executive Directors' letters of appointment

Our Non-Executive Directors serve a maximum of three, three-year terms (nine years in total).

Chairman and Non-Executive Directors	Original appointment date	Current letter of appointment end date
Sir Ian Davis	1 March 2013	28 February 2022
Lewis Booth [1]	25 May 2011	24 May 2020
Sir Frank Chapman [1]	10 November 2011	9 November 2020
George Culmer	2 January 2020	1 January 2023
Irene Dorner	27 July 2015	26 July 2021
Beverly Goulet	3 July 2017	2 July 2020
Lee Hsien Yang	1 January 2014	31 December 2022
Nick Luff	3 May 2018	2 May 2021
Sir Kevin Smith	1 November 2015	31 October 2021
Jasmin Staiblin	21 May 2012	20 May 2021

[1] Subject to shareholder approval, the Board have recommended that both Lewis Booth and Sir Frank Chapman serve as independent Non-Executive Directors and they will step down from the Board no later than the 2021 AGM (see page 77 for further details).

Statutory requirements

The Committee's composition, responsibilities and operation comply with the principles of good governance, as set out in the Code, the Listing Rules (of the Financial Conduct Authority) and the Companies Act 2006. The Directors' remuneration report has been prepared on the basis prescribed in the Large and Medium-sized Companies and Groups (Accounts and Reports) (Amendment) Regulations 2013.

SAFETY, ETHICS & SUSTAINABILITY

Key highlights

- Supporting management with embedding a safety culture
- Review of product safety management with a particular focus on Civil Aerospace and Power Systems
- Maintaining focus on product safety and HSE during the period of organisational change
- Monitoring of compliance with obligations under the SFO and DoJ DPAs and maintaining oversight of the implementation of Lord Gold's recommendations
- Overseeing deployment of revised mandatory training with a focus on anti-bullying and harrassment

Introduction

The Committee has continued to support management's efforts to embed core values and progress further towards a self-sustaining safety culture. We have sought to assure the safeguarding of these goals against a backdrop of ongoing Group transformation and the operational and financial challenges presented by the in-service issues with the Trent 1000.

At the beginning of the year, we re-named the Committee the Safety, Ethics & Sustainability Committee (previously the Safety & Ethics Committee). Although our remit has always been to cover sustainability issues, we wished to highlight our Board oversight role in this area. Key sustainability workstreams such as scientific, technological and engineering innovation fall within the remit of the Science & Technology Committee. However, the impact of this work on the Group's aggregate sustainability strategy is drawn together by this Committee.

We seek to balance scrutiny with support to the management team. I am encouraged by the progress we are making with the simplification and strengthening of our product safety processes; initiatives within HSE to protect the integrity of our assets through a safety case programme; and progress with our anti-bullying and harassment campaign.

Site visits were made during the year to Friedrichshafen, Germany; Bristol and Derby, UK; and Singapore to observe first-hand how our safety and ethics ethos is being translated into front-line operations. It was positive to see the impact the safety case programme is having on employee engagement and HSE practices.

Membership and operation of the Committee

In addition to myself, members of the Committee during 2019 were Irene Dorner, Nick Luff and Lee Hsien Yang. George Culmer joined the Committee in January 2020. All members of the Committee are independent Non-Executive Directors. Our biographies are on pages 62 to 64 and our meeting attendance is on page 66.

The Committee's responsibilities are outlined in its terms of reference which can be found at www.rolls-royce.com. We review these annually and refer them to the Board for approval. No changes have been made in 2019. This follows a detailed review in 2018 to ensure alignment with the principles of the Code.

Committee evaluation review

Belinda Hudson Limited (BHL) was appointed for a second year, this time to undertake a light touch review of the Board and committees, following a full review in 2018. The effectiveness review process of the Board and its committees is discussed in greater detail on page 74 together with overall findings.

Principal responsibilities

Product safety

- Maintain an understanding of and keep under review the Group's framework for effective governance of product safety.
- Monitor product safety performance, the response to product in-service issues and lessons learned.

HSE

- Oversee HSE governance, review performance, incidents and monitor improvement projects.
- Guide and support management in the promotion of committed HSE leadership as part of our culture.

Sustainability

- Oversee the Group's approach to sustainability, and related reporting, including monitoring of progress towards sustainability targets.
- Understanding the environmental impacts of products and operations.

Ethics & compliance

- Review the Group's compliance with relevant legislation.
- Keep Our Code and anti-bribery and corruption policies under review.
- Support the Board with its review of issues raised through the Ethics Line and other channels including reviewing the results of any investigations into ethical or compliance breaches or allegations of misconduct.

Principal risks

- Safety, compliance and climate change.

Areas of focus for 2020

- Continued product safety overview including progress to closure of issues in the large engine portfolio
- Oversight of management's leadership of HSE performance
- Continued focus on product safety governance as our transformation and simplification programmes progress
- In-depth review of climate change principal risk
- Oversight of the sustainability strategic review and launch of the new sustainability targets

Safety, Ethics & Sustainability Committee focus during 2019

Area of focus	Matters considered	Outcome
Product safety	Maintaining safety during organisational change. Product safety policy and processes, training, safety assurance framework and competence in manufacturing. Product safety performance and in-service issues. Product safety management systems. Product safety in Civil Aerospace with periodic review and scrutiny of potential Trent 1000 safety matters and their management.	The Committee was satisfied that product safety governance remained robust during transformation. The safety assurance framework is a sound incremental development. Safety performance remained at expected levels, with safety aspects of in-service issues handled competently and appropriately. The product safety management system in Civil Aerospace is effective and well-operated.
HSE	Detailed reviews of serious injury and high potential incidents. Events, key findings, shared learning and actions. HSE ambition, strategy and plans for continuous improvement. HSE performance including incidents, injuries, waste, energy use and GHG emissions metrics. HSE programmes: LiveWell, asset care, waste action.	Despite some improvement across particular areas of our business, overall Group TRI performance has remained flat. A series of directed campaigns and specialist support for identified areas will be introduced in 2020. HSE continues to be a key leadership priority for Rolls-Royce and our efforts are focused on driving self-sustaining improvement through embedding a safety culture, where everyone understands their role in our Zero Harm programme. Strengthening of HSE leadership, strategies, plans and communications as part of a structured approach to achieve continuous improvement. HSE programmes are at varying maturity levels and improvement trends reflect this. Efforts continue to strengthen programmes with focus on key themes.
Sustainability	Review of the Group's approach to sustainability and governance and endorsement of ongoing strategic review to strengthen consideration of social and environmental factors in Company policy and decision-making, including development of longer-term targets. Company positioning on sustainability, including external reporting and communications.	The purpose and approach to reviewing and revising our sustainability strategy was endorsed by the Committee. Considered and endorsed the introduction of a new sustainability framework. The Committee supported the ESG event in response to increasing investor interest in sustainability approach.
Ethics & compliance	Compliance with continuing obligations under the DPAs and implementation of Lord Gold's recommendations. Deployment of Our Code and Group policies. Resourcing of the ethics and compliance team and effectiveness of compliance officers. Embedding of ethics and compliance culture and behaviours. Review of number and nature of concerns raised through the Ethics Line. Management of intermediaries including screening, appointments, payments, termination and settlements. Review of pension consultation. Progress with data privacy binding corporate rules application.	Reviewed detailed plans for, and progress on, compliance. Reviewed the draft final report to DoJ. Group policies reviewed and new mandatory training introduced in 2019. The ethics and compliance team is effective. Bullying and harassment were prevalent themes and we will be monitoring the effectiveness of management's campaigns to address this. The intermediary processes are effective to manage the risks. Review of the speak up cases relating to the proposed changes to the UK defined benefit pension scheme.
Oversight of 2018 principal risks	Principal risks of compliance and safety reviewed.	These principal risks are reviewed and discussed at every meeting of the Committee and both continue to be managed effectively.

Product safety

We aim to go beyond compliance with regulatory product safety standards, setting a goal of continuous product safety improvement, in common with industry best practice in the markets in which we operate. This is regarded as fundamental to the Group's licence to operate and to the sustainability of our business. Product safety encompasses the design, manufacture, assembly, installation, in-service operation, maintenance and repair of products, across all of our businesses and regions where we operate. It is critical that product safety processes develop continuously to underpin the science and technological innovation that enables product designs to evolve and extend operational boundaries.

We continued to maintain a focus throughout the year on how safety risk was being managed through the Group's transformation programme. It was also noted that the electrical business was an area of high activity and innovation in the Company, which was progressing at pace with the acquisition of Siemens' eAircraft business. A particular degree of focus on product safety was warranted to ensure consistency with the standards across other parts of the organisation. This will be a priority for the Committee in 2020.

We were briefed in February on the progress of the implementation of the product safety training programme. The Committee noted the continuing commitment to ensuring that all employees are regularly reminded about the importance of product safety and their responsibility to influence it. The new course for senior managers, which the Committee completed in 2018, has continued into 2019 and the target audience was extended. A new classroom-based awareness training was launched in February 2019 with the aim of helping our engineers to understand how their contribution can prevent unsafe products through a series of case studies and discussion. Over 5,000 engineers completed this training in 2019 and feedback from delegates has been very positive. In addition, the approach to our all-employee online training has been completely refreshed and now provides a shorter, more impactful reminder of the importance of product safety and that it is everyone's responsibility. In all aspects of the training, which forms part of the 2019 mandatory requirement, there has been a focus on giving our people the confidence to speak up if they have any concerns regarding safety in any area of the business. The Committee believes that this is a positive step in driving a culture where safety is considered to be of utmost importance and concerns can be openly raised and addressed appropriately.

In February 2019, we also reviewed the overall product safety performance metrics which are used as an indicator of the performance of our product safety management system (PSMS). The metrics gave no indication of any trends of decline in the performance of our products and therefore demonstrate that the businesses continue to manage identified safety issues, with notable improvements in the age of open issues in various parts of the business. The Committee did, however, note a deterioration over the preceding 12 months in the age profile of open safety issues in the large engine portfolio within Civil Aerospace. Whilst it was noted that containment actions against each issue were in place, the Committee sought, and received further insight, into the reasons behind this trend. We reviewed the actions being taken by Civil Aerospace to reverse the trend. This was the subject of review by the Board in December. Further follow-up is planned in 2020.

POWER SYSTEMS PRODUCT SAFETY WORKSHOP

In order to provide effective oversight of product safety risk, the Committee remains conversant with the Group's PSMS. In March 2019, we focused our attention on product safety in Power Systems with a visit to the Group's facilities in Friedrichshafen, Germany.

We were briefed by the product safety leadership team on the wide variety of markets and applications which their product range addresses. This, together with a description of the regulatory landscape, set the scene for our review of the approach to product safety.

We learned how accountability for product safety is assigned and were briefed on the governance of product safety within Power Systems. Key product safety roles were described, together with how these roles interacted with project teams to ensure the safety of the products as they are developed.

We gained an understanding of the PSMS used within the business and were satisfied that this was appropriate for the range of products and applications and we saw how the PSMS was applied throughout the lifecycle of products.

We were briefed on how the business approaches the evaluation of a product safety risk and saw their approach to the reporting of safety concerns and to identifying and resolving unsafe conditions.

We reviewed high-level product safety performance measures and lastly, we examined in detail a recent product safety event to see how in practice this issue had been evaluated and contained until the point when corrective action could be applied in the field.

Overall, the workshop provided a good level of confidence that the PSMS, as operated in Power Systems, was effective, robust and competently operated.

Each year, the Committee reviews particular aspects of the Group's PSMS to ensure we maintain a good working knowledge of it and understand the continuous improvements that are being introduced. At our meeting in February, we discussed a report on product safety assurance which outlined the key initiatives that had been delivered in 2018 and the current drive to embed the use of the safety assurance framework and further improve safety awareness. A significant element of the Group transformation is the simplification of the RRMS. This represents an opportunity to emphasise the key principles which keep our products safe, at the same time assuring that valuable lessons embedded in existing processes are retained. The Committee will keep this under review during 2020 as it is imperative that our approach to product safety is appropriately defined within the system and our ability to manage it efficiently and effectively is maintained throughout.

In July, the Committee undertook its annual review of the product safety policy, which sets out the guiding principles by which we assure product safety and with which all employees must comply. In advance of the Committee meeting, the policy was reviewed at the Company product safety assurance board (CPSAB) and it was deemed to be an accurate and concise summary of our commitment to, and management of, product safety. Following the recommendation from the CPSAB, the Committee concluded that the policy was still fit for purpose and should therefore remain unchanged.

We also reviewed the product safety principal risk and were satisfied this was being managed effectively and within the boundaries of the agreed risk appetite. At each meeting, the Committee received an update on in-service incidents and, as part of these reviews, discussed any emerging product safety risks and how these were being identified and managed as part of the PSMS. Following on from the Committee's deep-dive reviews in 2018, these updates had a particular focus on Trent 1000 issues, and an additional review was held in August to review the response to a Trent 1000 in-flight shutdown on a Norwegian Airlines Boeing 787 on departure from Rome Airport. We were particularly pleased to hear that safety processes are being updated, where appropriate, to reflect any lessons learnt from each root cause analysis.

HSE

The Committee and management's objective remains to drive continuous improvement in HSE performance. HSE matters have been discussed at all our meetings during the year and we have paid particular attention to the levels of maturity in HSE leadership across the businesses of the Group.

At the end of 2018, and following a review of the HSE improvement programme, the Committee recommended that governance and reporting on this activity should be strengthened in order to give business leaders and governance committees greater visibility of the Group's improvement trajectory. At our meeting in February, the Committee heard that significant progress had been made in this area, including: the introduction of an HSE balanced scorecard reported quarterly; mandatory training on our Life Saving Rules including observation-intervention; and a monthly HSE update for the ELG to keep leaders informed and engaged.

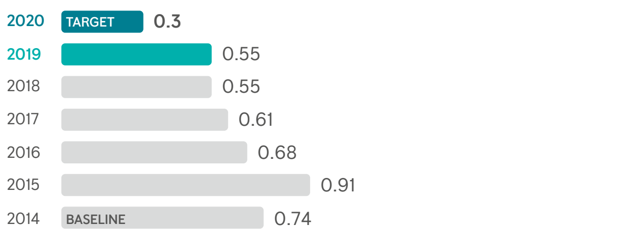
A head of HSE compliance role has been created to provide support in four key areas: how we define our Zero Harm improvement journey and critical milestones; how we plan more effectively and measure improvement; how we communicate to our stakeholders; and how we help others to understand and embrace their role in the improvement programme. Furthermore, several other new appointments have been made, strengthening both regional and specialist HSE capability.

The scope and format of the balanced scorecard was also presented to the Committee in February. It includes five leading indicators, which cover critical activities such as accountability, training and visibility of management and is balanced by two lagging indicators. The emphasis was on ensuring that data could be easily collected, inform performance, drive improvement and align to the Zero Harm strategy. The Committee was pleased to hear that as it matures, the data can be automated and shared with the businesses as a way of driving awareness, improvement and efficiency across the Group.

The Group HSE risk profile was discussed at our meeting in July and it was encouraging to hear that all risks are showing an improving or stable control trend. One additional risk, off-site working, has been added to the Group risk profile on the basis that all three businesses have identified it on their individual risk registers. Ensuring that these risks are monitored and managed appropriately continues to be a priority for the Committee.

At each of our meetings, we review the Group's key HSE activities, performance metrics, insights and learning, including the TRI rate. Our TRI rate in 2018 was 0.55 per 100 employees[1] and we remain committed to achieving the 2020 group target of 0.30. There were a total of 298 TRIs in 2019 which equates to an injury rate of 0.55. Of these, 15 resulted in major injuries. We did, however, see an 18% decrease in the overall number of major and high-potential incidents and a 1% increase in the overall severity index. Analysis of these events has identified that two keys areas will require the businesses' focus in 2020: slips, trips and falls and hand injuries, as these two classes of injury account for more than half of our reportable injuries. Although there has been a decrease in the number of electrical incidents following a focused campaign on this particular issue in 2018, we were concerned to hear that near misses and high-potential incidents continue to occur. ITP Aero has had a particularly challenging year with injuries and they have initiated a five-part improvement plan to address their HSE performance, which will continue into 2020 and beyond.

Total reportable injury (TRI) rate (per 100 employees) [1,2]



1 Our TRI rate for prior years has been restated to reflect the disposal of Commercial Marine business on 1 April 2019. ITP Aero data is included for years 2017, 2018 and 2019 only.

2 External assurance over STEM, energy, GHG and TRI rate data provided by Bureau Veritas. See page 203 for the sustainability assurance statement.

We were updated on the Zero Harm safety case programme which was launched in 2018, with the aim of gaining a better understanding of the latent HSE risks within our operations. In total, 42 safety cases have been completed and a range of improvement activities have been initiated at site level to close identified gaps. Of our high consequence hazards, it is clear that the level of control is improving in areas that have been the focus of recent improvement programmes. However over 74% of our sites are still classed as reactive on the five-step maturity model. The programme and associated improvement activity will remain an area of focus for the Committee in 2020.

Communication was a priority for the HSE function in 2019 and some significant progress has been made in developing our employees' awareness of HSE. Interaction with our leadership population has become more regular, through bulletins and online webinars, and this is imperative given the importance of the leadership shadow when it comes to embedding a safety culture. Furthermore, in June the Group introduced the Zero Harm award at the annual excellence awards as a way of highlighting some of the excellent HSE improvement activity being undertaken across the businesses.

Sustainability

With its broader remit of sustainability the Committee received a detailed overview of the Group's approach to sustainability and its ambition to be a leading responsible business. We considered and endorsed the role of the Committee in providing Board-level oversight of the sustainability approach and priorities, considering the interface between the Science & Technology Committee and the executive-level environment & sustainability committee.

In July, we were briefed on work underway to review and revise the Group's sustainability strategy, including the development of new longer-term targets. The purpose of this comprehensive review is to identify key decision points across the business where the consideration of social, ethical and environmental factors can be improved, with the aim of embedding sustainability into local decision-making and policies. The Committee endorsed this approach.

We recognise that the most significant contribution that Rolls-Royce can make to a more sustainable society is to accelerate the decarbonisation of its business activities and the sectors in which it operates. The Group has a long-standing three-pronged approach to minimising its environmental impacts: continually improving the efficiency of its products and services; developing novel lower carbon technologies such as electrification and the application of alternative fuel sources; and reducing the impacts of our operations and facilities. As a Committee, we appreciate success is only achievable in the context of the wider impacts of the Group, including issues such as human rights; ethics and compliance; and safety and wellbeing. The premise of our sustainability approach is to understand the impacts of the Group's activities on society, and to use that understanding to inform business decision-making to create shared value for us and our stakeholders.

At our December meeting, we considered and endorsed a proposal to put in place a sustainability framework, focused on areas of impact and influence, to help articulate this approach. The framework will act as a means of guiding decision-making. It builds on our purpose, vision and strategy to bring all elements of our broad sustainability approach together into a single framework for the first time. In implementing this framework, we will review sustainability-related policies and identify opportunities to improve further business practices through focused improvement programmes.

As an example, the Committee received an update on the Company-wide waste action programme and the significant achievements that have been made in 2019. This programme is designed to help deliver our global waste reduction targets (see page 44). A waste reduction of 29% was achieved across our top ten UK sites, a campaign to remove single-use plastics from our office and catering facilities was introduced and alternative technologies have helped to extend liquid coolant life that would otherwise have to be treated as waste (see page 44).

As a Committee, we were delighted to support the ESG event in April. This was the first time we had organised a specific ESG event, in response to increased investor interest in our sustainability approach. Members of the Executive Team joined us in a series of presentations and roundtable discussions and gained valuable insights from the questions and opinions voiced by those in attendance.

We are pleased that the Company has maintained its listing in the Dow Jones Sustainability Index (DJSI) for the sixteenth consecutive year. We continue to be one of only five aerospace and defence companies listed in the world index out of 38 invitees. Overall, our score improved slightly from 2018 and we achieved industry-leading scores in the risk and crisis management and environmental reporting sections.

MEMBER OF
Dow Jones
Sustainability Indices
In Collaboration with RobecoSAM

You can read more about the Group's sustainability activities on pages 40 to 44 and at www.rolls-royce.com.

Ethics and compliance

The Committee's focus in the year has been on overseeing the Group's ethics and compliance work plans. More details can be found in the Ethics and Compliance report on page 49. This included obligations to the prosecutors with whom the Company agreed DPAs in January 2017 and ensuring that recommendations put forward by Lord Gold (the Company's independent compliance adviser) had been implemented. Lord Gold attended the meeting in February to feed back on how he had been overseeing and supporting this work, as well as to report on key activities and areas of focus. He reported that, on recent site visits, he had been able to see how the ethics and compliance programme was working in practice, the right behaviours and attitudes were becoming embedded in the organisation and considerable improvement was evident amongst the teams. Focus remained on ensuring the right level of resource was in place to continue to drive the programme moving forward. In July, Lord Gold presented his draft report to the Committee which was later submitted to the SFO in line with the August deadline. The report noted the exemplary progress made in improving the Company's approach to ethics and anti-bribery and corruption compliance.

At an ethics deep dive session in April, the three-year ethics and compliance workplan from 2019 to 2021 was presented to the Committee. We noted the progress made in enhancing the ethics and compliance teams in each of the businesses and their improved accountability for ethics and compliance as a result.

At each of our meetings during the year, we received an update from the General Counsel on the Group's continuing dialogue and co-operation with prosecutors, regulators and government agencies. We also received regular reports and briefings from the head of ethics and compliance.

The Committee reviews the operation of the speak up procedures at each meeting; this includes statistics, types of cases raised, and the average completion time. In 2018, we observed that bullying and harassment were prevalent themes and in March this year, the Group-wide anti-bullying and harassment campaign was launched as part of the wider care initiative in respect of our people, with the aim of creating an environment where everyone can be at their best. This included mandatory scenario-based training for all employees and leaders, as well as specific training for our people team and trade union employee representatives, as well as regular updates to the Executive Team and ELG. In July, the Committee also undertook a light version of this training so that we could get a better understanding of the impact and benefit it would have on employees. Focus has also been given to the speed at which a resolution is reached once a bullying and harassment case has been raised and, on average, the time taken to close an investigation is 25 days.

Following on from the roll-out in 2018 of Our Code and simplified Group policies, revised mandatory training requirements were launched in 2019 with a completion deadline of the end of October. New modules covering conflicts of interest and binding corporate rules were added to the anti-bullying and harassment and simplified product safety training.

A refresher on Zero Harm life-saving rules was also included as was an annual requirement for all managers globally to certify to Our Code.

Our Code, which sets out the principles that underpin our values and the way we do business, was developed as a mobile-enabled app and launched at the beginning of the year. It allows our employees and suppliers to access it from wherever they are in the world and it has received positive feedback both internally and externally.

We received a report from the head of ethics and compliance who carried out an independent review of the speak up cases which had been received on the proposed changes to the UK defined benefit pension scheme. The Committee received the report and noted the conclusions, which would be shared with elected representatives of the affected employees and all decision makers. While the report found that there had clearly been some room for improvement, particularly in the way the changes had been communicated, the majority of the concerns raised via the speak up channels were not founded.

We also monitored our ongoing compliance with the General Data Privacy Regulations and the application for the EU regime of Data Privacy Binding Corporate Rules.

Looking forward

In the year ahead, we will continue to monitor developments with the Civil Aerospace large engine in-service issues with a particular focus on the age profile of open safety issues. We will provide appropriate oversight to ensure the integrity of product safety governance is maintained as the transformation programme continues and the RRMS is reviewed.

We will continue to monitor and support progress and performance as the Zero Harm and LiveWell programmes are further embedded, with a particular interest in seeing injury rates and high-potential incidents reduce so that we can achieve our stated 2020 targets.

The Board has included the risk of climate change to future revenue growth as an additional principal risk and we will undertake an in-depth review of this risk during the course of 2020 on behalf of the Board. We will also provide oversight as the Group carries out a sustainability strategic review and agree a new set of sustainability targets, including environmental targets, over the next decade.

We will continue to monitor progress of our ethics and compliance programmes as well as the outcomes from our bullying and harassment campaign and reports to our Ethics Line. We will continue to oversee the Company's compliance with the DPA in the UK and will commission an external assessment of our compliance programme during 2020 to ensure that we have maintained compliance with all of Lord Gold's recommendations.

We look forward to seeing continued tangible progress from the efforts by management to drive the desired behaviours and mindset, reinforcing an ethical, safety-focused and sustainability culture across the organisation.

Sir Frank Chapman
Chairman of the Safety, Ethics & Sustainability Committee

SCIENCE & TECHNOLOGY

SIR KEVIN SMITH
Chairman of the Science & Technology Committee

Key highlights

- Technology strategy, investment and programmes review
- Review electrical systems strategy
- Review of UltraFan demonstrator, Advance3 and power gearbox
- Services strategy review
- Review of digital strategy and capability

Introduction

In 2019, the Committee continued to provide dedicated focus to the research and technology part of the Group's R&D investment that enables the Group to conceive, design and deliver world-class technology that meets our customers' current and future needs. We provide directional input and oversight of the Group's scientific and technological strategy, processes and related investments.

In addition to our scheduled meetings, we visited the power gearbox (PGB) facility and Civil Aerospace engine assembly and test facility in Germany and the Defence operations and engine test beds in the UK.

Membership and operation of the Committee

In addition to myself, members of the Committee during 2019 were Ruth Cairnie, Sir Frank Chapman, Brad Singer and Jasmin Staiblin, all Non-Executive Directors. Our biographies are on pages 62 to 64 and meeting attendance is on page 66. Brad Singer stepped down as a member of the Committee in December. Ruth also stepped down at the end of the year. I would like to take this opportunity to thank the Committee for their unstinting enthusiasm and engagement during the year.

The Committee's responsibilities are outlined in its terms of reference, available at www.rolls-royce.com. We review these annually and refer them to the Board for approval. No changes have been made in 2019. This follows a detailed review in 2018 to ensure alignment with the principles of the Code.

Other attendees

In addition to the members of the Committee, the Chairman, Chief Executive, Chief Financial Officer and any of the Non-Executive Directors may attend one or more meetings at the Committee chairman's invitation. The Committee is supported by the corporate governance director and the Chief Technology Officer.

Committee evaluation review

Belinda Hudson Limited (BHL) was appointed for a second year, this time to undertake a light touch review of the Board and committees, following a full review in 2018. The effectiveness review process of the Board and its committees is discussed in greater detail on page 74 together with overall findings.

Principal responsibilities

Technology strategy

- Review the strategic direction of the Group's research, technology and development activities, with consideration to their environmental impact amongst other matters, and ensure investment is allocated appropriately.
- Keep under review the key technology programmes.
- Assist the Board in its oversight of major R&D investment and provide assurance on its competitiveness and the adequacy of technology investment, with thorough consideration to the environmental impact of new products and technology.

Cross-sector technology

- Oversee the effectiveness of key engineering and technology processes and operations, including delivery of major product development and technology programmes.

Technology capabilities and skills

- Oversee processes for ensuring effective resourcing and development of required technological capability and skills.
- Conduct visits to R&D facilities.

Technology trends and risks

- Provide assurance on the identification and management of key technological risks.
- Review and consider any other topics or risks appropriate to the overall remit of the Committee as delegated by the Board.

Principal risk

- Disruptive technologies and business model, a subset of competitive environment.

Areas of focus for 2020

- Oversight of the Group's technology programme with focus on technologies supporting the Group's approach to low carbon power
- Reviews of key programmes and business cases including SMRs, UltraFan and hybrid-electric regional aviation
- Review of digital, electrical and hybrid-electrical and hydrogen fuel based technologies
- Continued review of efficiency and effectiveness of technology development, assessment of skills and capability development and alignment with the technology strategy

Science & Technology Committee focus during 2019

Area of focus	Matters considered	Outcome
Technology strategy	The Group's technology strategy. Investment allocation. Review of key technology programmes. Efficiency and effectiveness review.	The strategic objectives and associated investment funding allocations were confirmed to be appropriate. The review of key technology programmes helped shape the Board's discussions during the year. An in-depth review of the Defence aerospace technology programmes was presented and endorsed by the Committee. The Committee made a number of recommendations to management to improve the efficiency and effectiveness of the Group's future research and technology programmes.
Cross-sector technology	UltraFan demonstrator. The Group's electrical systems strategy.	Oversight of the UltraFan demonstrator programme maintained throughout the year and advised the Board on progress. Direction of the Group electrical systems technology development supported.
Technology capabilities and skills	Engineering capabilities of the future. Visits to large engine assembly and test bed sites.	Reviewed the engineering resource prioritisation across the Group. Visits provided a good opportunity to evidence physical progress on key technology programmes, together with an invaluable opportunity to meet the local teams.
Technology trends and risks	Artificial intelligence and internet of things.	Endorsement of both the artificial intelligence and internet of things programmes and their part in the Group's future technology strategy.
Oversight of principal risk	Disruptive technologies and business model.	A subset of the principal risk, competitive environment, the review confirmed that the identification of disruptive technology threats and ongoing mitigation activities continued to support the direction for future key activities.

2019 overview

In 2019, the Committee continued with our work from the previous year in overseeing the technology strategy, the prioritisation of resources towards technology development and acquisition, and assessing competitiveness in key technology and product areas. In doing this, we place importance on ensuring active dialogue with engineering and technology leaders and experts, inviting relevant employees to Committee meetings, meeting with employees during site visits and developing future leaders through the Board apprentice programme.

At the first meeting of the year in February, we reviewed the 2019 technology programme and the investment funding allocation. We also received an update on the progress made on technology plans for each business and also in the Innovation Hub.

As reported in previous years, significant investment is directed towards aerospace technology demonstrators to validate new architectures and gas turbine technologies vital to supporting future competitiveness and delivering a step change improvement in environmental impact. We conducted several reviews of the UltraFan demonstrator programme over the year, noting progress in its design and testing, and understanding the plans and choices on competitive differentiating technologies which would enable a step change in efficiency. We discussed the UltraFan business case and options for meeting potential customer requirements, the phased investments proposed to deliver the programme and the approach to managing risks and programme dependencies. During the year, we received regular progress updates on key technologies, particularly the PGB, which is a critical component connecting the Advance3 core to the composite front fan system, and is undergoing design maturity testing ahead of the first UltraFan demonstrator engine run in 2021. In April, the Committee visited the PGB test facility and dedicated team area in Dahlewitz, Germany and met with key staff. We also undertook a tour of the Civil Aerospace engine assembly and test facility located on the same site. The Committee advised the Board on progress and funding continuation of the programme.

The Committee also reviewed progress on development and maturing key high-temperature gas turbine technology which has applicability across all aero-engine programmes. We received a presentation on the Group's strategy and competitive position on propulsion for business aviation to understand how the technology was being developed.

In September, the Committee was updated on the development of the Group's technology strategy which includes a growing level of investment in new capability in electrical and digital technologies, and the launch of the study phase of the small modular reactor (SMR) programme, all of which will play a part in the Group's approach to lower carbon power and the shift to low carbon technologies for the future.

We were encouraged to hear that electrical systems technology development is increasingly becoming central to delivering the businesses' future product plans. In aerospace applications, a number of demonstrator programmes are taking shape, including the E-Fan X megawatt hybrid-electric propulsion programme with Airbus for which a new megawatt generator is being developed, and kilowatt hybrid-electric aero propulsion research and application demonstrators that were announced in the UK and Germany. We were briefed on the acquisition of the aerospace electrical components business from Siemens and its fit to the Group's electrical technology roadmap. Further electrical technology development will be a focus area for the Committee in the coming year.

The Committee received a presentation on the digital strategy and five-year roadmap for digital capability and the digital thread across engineering design, manufacturing and services, and reviewed the current status of transitioning away from legacy systems. We were updated regarding the progress with how the IT and engineering systems were supporting the transformation programme for engineering. We received specific presentations on the Company's strategy on artificial intelligence (AI) and the internet of things (IoT). We were taken through how specialists from the R² Data Labs team facilitate the application of AI and IoT and were briefed on the broad training provided to enhance the workforce's skills through the Digital Academy. We also discussed the Group's approach to an ecosystem to access these rapidly advancing technologies and how the strategy of in-house skills and capabilities would affect competitiveness.

The Committee reviewed the proposal to develop a new generation of SMRs that would leverage the Company's advanced manufacturing capabilities as well as its nuclear power design expertise to develop a near-zero carbon source of power generation by the early 2030s at a competitive levelised cost of electricity. We were given an overview of potential for a very large market demand including the potential for future net-zero carbon fuel production at scale. We received a briefing on consortium partnerships, potential business models and the business case, to understand the opportunity which has now been launched in a first phase with UK Government funding support.

We reviewed the technology across the Defence business and received a presentation on opportunities and programmes in the US and the UK. We also visited the Company's operations and engine test beds in Bristol, UK where, among other things, integrated electrical systems are validated. We discussed near-term defence market opportunities and how our core gas turbine technologies and digital engineering design systems and approach could enhance our position to win competitive contracts. The requirements for future defence systems and solutions are driving development of a combination of technologies, such as electrical, power and thermal management and advanced specialised combat propulsion technologies which are being developed under the UK Tempest advanced combat fighter programme. We were also briefed on the progress on the integrated power systems for directed energy systems, which have growth potential for land, sea and airborne applications. Finally, we reviewed the planned investment and resourcing roadmap that will enable the business to continue to pursue, develop and grow its defence markets.

Further, the Committee received an update on the Group's services strategy and associated technology development plans. We were pleased to see real progress and significant value delivered by application of digital, inspection and repair technologies. We encouraged management to continue to pursue new technology and ways of working in these areas, noting that this is critical in addition to the product investments to improve engine durability in service.

To get an understanding of the investment choices across all engineering activities and related skill sets, the Committee undertook a detailed review of the full engineering investment and resource prioritisation across the Group. We were briefed on spend and resourcing relating to new product development, technology development and in-service product support needs. The Committee supports the changes that have been introduced to improve the visibility of investment choices and how they relate to the application of key skilled resources. This provided a better understanding of the overall technology investments and technology choices.

We also gave our support to further development of the approach to strategic management of technology acquisition and the Company's approach to technology partnering as a means of obtaining access to co-investment, skilled resources and accelerating technology development. We discussed the risks and opportunities arising from protection/exploitation of intellectual property and have further encouraged increased attention in this area.

We further received an update on the Group's risk appetite and assessment of technologies that enable disruption with regard to the Group's 2019 principal risk related to the competitive environment. This will remain a live process to ensure awareness of potential shifts.

Looking forward

The focus for the Committee in 2020 will be on low carbon technologies that are vital to innovation and future products and services and underpin the Group's sustainability strategy. We will continue to monitor the UltraFan demonstrator and associated technology programmes and progress on the first phase of SMRs for low carbon power generation and review the business case for making use of SMRs to produce sustainable fuels.

The continuing development of the Group's capabilities and technologies in electrical and digital will also feature strongly in our agenda, including the case for hybrid-electrical propulsion for regional aviation as well as the future of reciprocating engines and alternative sustainable fuels.

These are exciting times for technologists and engineers in Rolls-Royce as the Company accelerates its drive for sustainable propulsion providing opportunity to acquire new skills, work on new products and to play a full part in securing a low carbon world. I admire their dedication to achieving that goal and cannot help but be a little envious of the opportunities it provides.

In closing this year's report, I would like to pay tribute to the work of our global network of 29 University Technology Centres and seven Advanced Manufacturing Research Centres who play a vital role in the development of our core technology and science base. The 1,300 people, including 500 PHDs, in those institutions who work in partnership with our employees are a crucial part of the extended Rolls-Royce family and I thank them on behalf of the Board for the major contribution they make to building the future of Rolls-Royce.

Sir Kevin Smith
Chairman of the Science & Technology Committee

RESPONSIBILITY STATEMENTS

Statement of Directors' responsibilities in respect of the Financial Statements

The Directors are responsible for preparing the Annual Report and the Financial Statements in accordance with applicable law and regulation.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the Group Financial Statements in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union and the parent company Financial Statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 *Reduced Disclosure Framework*, and applicable law).

Under company law, the Directors must not approve the Financial Statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and parent company and of the profit or loss of the Group and parent company for that period.

In preparing the Financial Statements, the Directors are required to:

— select suitable accounting policies and then apply them consistently;

— state whether applicable IFRSs, as adopted by the European Union, have been followed for the Group Financial Statements and United Kingdom Accounting Standards comprising FRS 101, have been followed for the Company Financial Statements, subject to any material departures disclosed and explained in the Financial Statements;

— make judgements and accounting estimates that are reasonable and prudent; and

— prepare the Financial Statements on the going concern basis unless it is inappropriate to presume that the Group and parent company will continue in business.

The Directors are also responsible for safeguarding the assets of the Group and parent company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are responsible for keeping adequate accounting records that are sufficient to show and explain the Group and parent company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and parent company. This enables them to ensure that the Financial Statements and the Directors' Remuneration Report comply with the Companies Act 2006 and, as regards the Group's Consolidated Financial Statements, Article 4 of the IAS Regulation.

The Directors are responsible for the maintenance and integrity of the parent company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Directors' confirmations

The Directors consider that the Annual Report, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group and parent company's position and performance, business model and strategy.

Each of the Directors, whose names and functions are listed in the Directors' Report, confirm that to the best of his or her knowledge:

— the Group Financial Statements, which have been prepared in accordance with IFRSs as adopted by the European Union, give a true and fair view of the assets, liabilities, financial position and loss of the Group;

— the parent company Financial Statements, which have been prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 *Reduced Disclosure Framework*, and applicable law), give a true and fair view of the assets, liabilities, financial position and result of the Company; and

— the Strategic Report includes a fair review of the development and performance of the business and the position of the Group and parent company, together with a description of the principal risks and uncertainties that it faces.

By order of the Board

Pamela Coles
Company Secretary
28 February 2020

OTHER STATUTORY INFORMATION

Share price

During the year, the share price reduced by 18% from 830p to 683p, compared to a 14% increase in the FTSE aerospace and defence sector and a 12% increase in the FTSE 100. The Company's share price ranged from 680p in December 2019 to 1004p in February 2019.

Share capital

On 31 December 2019, the Company's issued share capital comprised of:

1,930,995,313	Ordinary shares	20p each
30,607,559,470	C Shares	0.1p each
1	Special Share	£1

The ordinary shares are listed on the London Stock Exchange.

Payment to shareholders

The Company issues non-cumulative redeemable preference shares (C Shares) as an alternative to paying a cash dividend.

Shareholders can choose to:

- redeem all C Shares for cash;
- redeem all C Shares for cash and reinvest the proceeds in the C Share Reinvestment Plan (CRIP); or
- keep the C Shares.

The CRIP is operated by Computershare Investor Services PLC (the Registrar). The Registrar will purchase ordinary shares in the market for shareholders electing to reinvest their C Share proceeds. Shareholders wishing to participate in the CRIP or redeem their C Shares in July 2020 must ensure that their instructions are lodged with the Registrar no later than 5.00pm on 1 June 2020 (CREST holders must submit their election in CREST in sufficient time for it to settle before 2.55pm on 1 June 2020). Redemption will take place on 3 July 2020.

At the 2020 AGM, the Directors will recommend an issue of 71 C Shares with a total nominal value of 7.1p for each ordinary share. The C Shares will be issued on 1 July 2020 to shareholders on the register on 24 April 2020 and the final day of trading with entitlement to C Shares is 23 April 2020. Together with the interim issue on 3 January 2020 of 46 C Shares for each ordinary share with a total nominal value of 4.6p, this is the equivalent of a total annual payment to ordinary shareholders of 11.7p for each ordinary share.

Further information for shareholders is on pages 210 and 211.

Share class rights

The full share class rights are set out in the Company's Article, which are available at www.rolls-royce.com. The rights are summarised below.

Ordinary shares

Each member has one vote for each ordinary share held. Holders of ordinary shares are entitled to: receive the Company's Annual Report; attend and speak at general meetings of the Company; appoint one or more proxies or, if they are corporations, corporate representatives; and exercise voting rights. Holders of ordinary shares may receive a bonus issue of C Shares or a dividend and on liquidation may share in the assets of the Company.

C Shares

C Shares have limited voting rights and attract a preferential dividend of 75% of LIBOR on the 0.1p nominal value of each share, paid on a twice-yearly basis. The Company has the option to redeem the C Shares compulsorily, at any time if: the aggregate number of C Shares in issue is less than 10% of the aggregate number of all C Shares issued on or prior to that time or the event of a capital restructuring of the Company; the introduction of a new holding company; the acquisition of the Company by another company; or a demerger from the Group.

On a return of capital on a winding-up, the holders of C Shares shall be entitled, in priority to any payment to the holders of ordinary shares, to the repayment of the nominal capital paid-up or credited as paid-up on the C Shares held by them, together with a sum equal to the outstanding preferential dividend which will have been accrued but not paid until the date of return of capital.

The holders of C Shares are only entitled to attend, speak and vote at a general meeting if a resolution to wind up the Company is to be considered, in which case they may vote only on that resolution.

Special Share

Certain rights attach to the special rights non-voting share (Special Share) issued to the UK Secretary of State for Business, Energy & Industrial Strategy (Special Shareholder). These rights are set out in the Articles. Subject to the provisions of the Companies Act 2006 (the Act), the Treasury Solicitor may redeem the Special Share at par value at any time. The Special Share confers no rights to dividends but in the event of a winding-up it shall be repaid at its nominal value in priority to any other shares.

Certain provisions of the Articles (in particular those relating to the foreign shareholding limit, disposals and the nationality of the Company's Directors) that relate to the rights attached to the Special Share may only be altered with the consent of the Special Shareholder. The Special Shareholder is not entitled to vote at any general meeting or any other meeting of any class of shareholders.

Restrictions on transfer of shares and limitations on holdings

There are no restrictions on transfer or limitations on the holding of the ordinary shares or C Shares other than under the Articles (as described here), under restrictions imposed by law or regulation (for example, insider trading laws) or pursuant to the Company's share dealing code. The Articles provide that the Company should be and remain under UK control. As such, an individual foreign shareholding limit is set at 15% of the aggregate votes attaching to the share capital of all classes (taken as a whole) and capable of being cast on a poll and to all other shares that the Directors determine are to be included in the calculation of that holding. The Special Share may only be issued to, held by and transferred to the Special Shareholder or his successor or nominee.

Shareholder agreements and consent requirements

No disposal may be made to a non-Group member which, alone or when aggregated with the same or a connected transaction, constitutes a disposal of the whole or a material part of either the nuclear propulsion business or the assets of the Group as a whole, without the consent of the Special Shareholder.

Changes to the Articles of Association

The Articles may be altered or added to or new articles may be adopted by a special resolution of the shareholders of the Company, subject to the provisions of the Act.

Authority to issue shares

At the 2019 AGM, authority was given to the Directors to allot new C Shares up to a nominal value of £500m as an alternative to a cash dividend.

In addition, an ordinary resolution was passed authorising the Directors to allot new ordinary shares up to a nominal value of £126,387,015 equivalent to one-third of the issued share capital of the Company. This resolution also authorised the Directors to allot up to two-thirds of the total issued share capital of the Company, but only in the case of a rights issue.

A further special resolution was passed to effect a disapplication of pre-emption rights for a maximum of 5% of the issued share capital of the Company.

These authorities are valid until the 2020 AGM or 30 June 2020, whichever is earlier, and the Directors propose to renew each of them at the 2020 AGM. The Board believes that these authorities will allow the Company to retain flexibility to respond to circumstances and opportunities as they arise.

ITP Aero

Following approval from the relevant authorities in Spain, on 19 December 2017 the Group acquired a 53.1% shareholding in ITP Aero from SENER resulting in ITP Aero becoming a wholly-owned subsidiary of the Company. The consideration of €718m was settled over a two-year payment period, payable in eight equal instalments, and the agreement with SENER allowed the Company flexibility to settle up to 100% of the consideration in the form of ordinary shares. Three payments were settled in 2019 all in the form of ordinary shares, as follows:

Instalment	No. of ordinary shares	Date
6th	8,681,110	19 March 2019
7th	9,301,958	19 June 2019
8th	10,990,194	19 September 2019

Authority to purchase own shares

At the 2019 AGM, the Company was authorised by shareholders to purchase up to 189,580,523 of its own ordinary shares representing 10% of its issued ordinary share capital.

The authority for the Company to purchase its own shares expires at the conclusion of the 2020 AGM or 30 June 2020, whichever is the earlier. A resolution to renew the authority will be proposed at the 2020 meeting.

The Company did not purchase any of its own ordinary shares during 2019.

Deadlines for exercising voting rights

Electronic and paper proxy appointments, and voting instructions, must be received by the Registrar not less than 48 hours before a general meeting.

Voting rights for employee share plan shares

Shares are held in an employee benefit trust for the purpose of satisfying awards made under the various employee share plans. For shares held in a nominee capacity or if plan/trust rules provide the participant with the right to vote in respect of specifically allocated shares, the trustee votes in line with the participants' instructions. For shares that are not held absolutely on behalf of specific individuals, the general policy of the trustees, in accordance with investor protection guidelines, is to abstain from voting in respect of those shares.

Change of control

Contracts and joint venture agreements

There are a number of contracts and joint venture agreements which would allow the counterparties to terminate or alter those arrangements in the event of a change of control of the Company. These arrangements are commercially confidential and their disclosure could be seriously prejudicial to the Company.

Borrowings and other financial instruments

The Group has a number of borrowing facilities provided by various banks. These facilities generally include provisions which may require any outstanding borrowings to be repaid or the alteration or termination of the facility upon the occurrence of a change of control of the Company. At 31 December 2019, these facilities were less than 2% drawn (2018: 19%).

The Group has entered into a series of financial instruments to hedge its currency, interest rate and commodity exposures. These contracts provide for termination or alteration in the event that a change of control of the Company materially weakens the creditworthiness of the Group.

Employee share plans

In the event of a change of control of the Company, the effect on the employee share plans would be as follows:

- Deferred share bonus – the shares would be released from trust immediately.
- ShareSave – options would become exercisable immediately. The new controlling company might offer an equivalent option in exchange for cancellation of the existing option.
- Share Incentive Plan (SIP) – consideration received as shares would be held within the SIP, if possible, otherwise the consideration would be treated as a disposal from the SIP.
- LTIP – awards would vest on the change of control, subject to the Remuneration Committee's judgement of performance and may be reduced pro rata to service in the vesting period. Any applicable holding period will cease in the event of a change in control.

Accounting policies, financial instruments and risk

Details of the Group's accounting policies, together with details of financial instruments and risk, are provided in notes 1 and 19 to the Consolidated Financial Statements on pages 123 and 157.

Major shareholdings

At 31 December 2019, the following shareholders had notified an interest in the issued ordinary share capital of the Company in accordance with section 5.1.2 of the Disclosure and Transparency Rules:

Shareholder	Date notified	% of issued ordinary share capital*
Blackrock, Inc.	5 November 2019	below 5
Harris Associates L.P.	21 October 2019	5.01
ValueAct Indirect Holdings	22 March 2019	9.48
The Capital Group Companies, Inc	12 October 2017	5.07

* Percentages are shown as a percentage of the Company's issued share capital when the Company was notified of the change in holding.

As at 27 February 2020, no further changes had been notified.

Directors

The names of the Directors who held office during the year are set out on pages 62 to 64. In addition, Brad Singer and Ruth Cairnie were directors during the year. They stepped down on 9 December and 31 December respectively.

Directors' Indemnities

The Directors have the benefit of an indemnity provision contained in the Articles. In addition, the Directors have been granted a qualifying third party indemnity provision which was in force throughout the financial year and remains in force. Also, throughout the year, the Company purchased and maintained Directors' and Officers' liability insurance in respect of itself and for its Directors and Officers.

Disclosures in the Strategic Report

The Board has taken advantage of section 414C(11) of the Act to include disclosures in the Strategic Report including:

- employee involvement;
- the employment of disabled people;
- information about charitable donations;
- the future development, performance and position of the Group;
- the financial position of the Group;
- R&D activities;
- the principal risks and uncertainties; and
- particulars of important events affecting the Company since the financial year end.

Political donations

The Company's policy is that it does not, directly or through any subsidiary, make what are commonly regarded as donations to any political party. However, the Act defines political donations very broadly and so it is possible that normal business activities, such as sponsorship, subscriptions, payment of expenses, paid leave for employees fulfilling certain public duties and support for bodies representing the business community in policy review or reform, which might not be thought of as political expenditure in the usual sense, could be captured. Activities of this nature would not be thought of as political donations in the ordinary sense of those words. The resolution to be proposed at the 2020 AGM, authorising political donations and expenditure, is to ensure that the Group does not commit any technical breach of the Act.

During the year, expenses incurred by Rolls-Royce North America, Inc. in providing administrative support for the Rolls-Royce North America political action committee (PAC) was US$81,866 (2018: US$111,961). PACs are a common feature of the US political system and are governed by the Federal Election Campaign Act.

The PAC is independent of the Group and independent of any political party. The PAC funds are contributed voluntarily by employees and the Group cannot affect how they are applied, although under US law, the business expenses are paid by the employee's company. Such contributions do not count towards the limits for political donations and expenditure for which shareholder approval will be sought at this year's AGM to renew the authority given at the 2019 AGM.

Branches

Rolls-Royce is a global company and our activities and interests are operated through subsidiaries, branches of subsidiaries, joint ventures and associates which are subject to the laws and regulations of many different jurisdictions. Our subsidiaries, joint ventures and associates are listed on pages 187 to 193.

Financial instruments

Details of the Group's financial instruments are set out in note 19 to the Consolidated Financial Statements.

Related party transactions

Related party transactions are set out in note 26 to the Consolidated Financial Statements.

Information required by UK Listing Rule (LR) 9.8.4

There are no disclosures to be made under LR 9.8.4.

Management report

The Strategic Report and the Directors' Report together are the management report for the purposes of Rule 4.1.8R of the DTR.

Disclosure of information to auditors

Each of the persons who is a Director at the date of approval of this report confirms that so far as the Director is aware, there is no relevant audit information of which the Company's auditor is unaware. The Director has taken all steps that he or she ought to have taken as a director in order to make himself or herself aware of any relevant audit information and to establish that the Company's auditor is aware of that information.

This confirmation is given, and should be interpreted, in accordance with the provisions of section 418 of the Act.

Greenhouse gas emissions

In 2019, our total net greenhouse gas (GHG) emissions were 586 kilotonnes carbon dioxide equivalent ($ktCO_2e$). This represents a decrease of 3% compared with 602 $ktCO_2e$ in 2018.

Aspect	Tonnes CO_2e	2015	2016	2017	2018	**2019**
Emissions from activities for which the Company owns or controls including the combustion of fuel and operation of facilities. Direct GHG emissions (Scope 1)	Global (excluding UK)	209,302	229,691	254,032	250,237	**247,159**
	UK	108,325	103,581	99,918	85,120	**91,396**
Emissions from the purchase of electricity, heat, steam and cooling purchased for our use. Indirect GHG Emissions (Scope 2) location-based	Global (excluding UK)	170,276	168,849	161,115	166,199	**161,035**
	UK	173,535	144,334	122,657	100,827	**86,548**
Total gross GHG emissions	Global (excluding UK)	379,578	398,540	415,147	416,436	**408,193**
	UK	281,861	247,915	222,575	185,947	**177,944**
Energy consumption used to calculate above emissions – kWh	Global (excluding UK)	1,538,198,000	1,639,939,000	1,694,823,000	1,707,642,000	**1,648,572,000**
	UK	885,952,000	832,549,000	811,948,000	762,917,000	**767,701,000**
Intensity Ratio (total GHG emissions per £m revenue)	Total	0.054	0.047	0.046	0.040	**0.038**
Emissions from the purchase of electricity, heat, steam and cooling purchased for our use. Indirect GHG emissions (Scope 2) market-based]	Global (excluding UK)	–	–	–	–	**–**
	UK	–	–	–	–	**874**
Outside of Scopes	Global (excluding UK)	–	–	–	–	**–**
	UK	–	–	–	–	**19,336**

The above figures include 230,972,000 kWh of renewable energy purchased via a long-term Power Purchase Agreement (PPA) for use by our facilities based in the UK, supplied through a third party. The source includes a proportion of electricity that was generated by the combustion of biofuel. The associated emissions are included above under the location-based Scope 2 emissions (using grid average emission factors). They are also reported separately as market-based Scope 2 emissions (covering the emissions of nitrous oxide and methane) and Outside of Scopes (covering the emissions of carbon dioxide). This has resulted in a net reduction of 39 kilotonnes from our total GHG emissions.

In addition, the above figures include 7,354,000 kWh of electricity generated on-site from renewable energy sources.

The figures for 2015 through to 2018 inclusive have been restated to remove emissions associated with the Commercial Marine business sold on 1 April 2019. Figures for 2015 exclude emissions associated with ITP Aero (which became a wholly owned subsidiary on 19 December 2017). We have included the reporting of fugitive emissions of hydrofluorocarbons (HFCs), associated with air conditioning equipment, into our GHG emissions figures from 2016. These include emissions from our facilities in the UK, US, Canada and France only. We do not anticipate that emissions from other facilities will have a material impact.

With the exceptions noted above, we have reported on the underlying energy use and emission sources required under the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018. All these sources fall within the scope of our Consolidated Financial Statements.

We have used the GHG Protocol Corporate Accounting and Reporting Standard (revised edition) as of 31 December 2014 utilising the operational control approach and emission factors from the UK Government's GHG Conversion Factors for Company Reporting 2019. We report our emissions of: carbon dioxide; methane; nitrous oxide; hydrofluorocarbons; and perfluorocarbons on a carbon dioxide equivalent basis. We have no emissions of sulphur hexafluoride or nitrogen trifluoride.

Further details on our methodology for reporting and the criteria used can be found within our basis of reporting, available to download at www.rolls-royce.com.