



Rolls-Royce Holdings plc

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Rolls Royce Holdings plc

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Andrew Gollan; Berenberg

Christian Laughlin; Bernstein

Rami Myerson; Investec Bank

David Perry; JP Morgan Chase

Jaime Rowbotham; Deutsche Bank

Robert Stallard; Vertical Research Partners

Jennifer Ramsey, Head of IR: So thank you for joining us here at London Stock Exchange, and for those of you joining online. My name is Jennifer Ramsey, and I lead the investor relations team at Rolls-Royce. I want to welcome you to our full year results presentation for 2017.

The agenda for today will be Warren East, our Chief Executive, will share his perspectives on the progress we've made and the challenges we faced in 2017. Then Stephen Daintith, our Chief Financial Officer, will talk through our financial results in more detail and with reference to both current accounting and IFRS 15. And Warren will then round up with his outlook for the year ahead. In terms of the presentation, the presentation should take roughly 45 minutes.

We do have a lot to cover, though. And then we will be taking questions. If you want to take a question online, please access the webcast service via our webpage. And we'll endeavor to answer those questions, if we haven't already answered them in the room.

And with that, I'll hand over to Warren.

Warren East, CEO: Great. Thank you very much, Jennifer. Morning, everybody. Thank you all for coming. And I hope I can drive the projector this morning.

I'm going to start with a few highlights. I'll then do a quick run around the business, step back and review the priorities we set a year ago for 2017 and reflect a little bit on the progress there. Stephen will add some significant colour to the numbers before we summarize and do questions.

So I think the summary on this morning is we say this is an encouraging set of results. And I actually feel it's good progress to be standing here reporting record revenues, a growth in profit, an almost tripling of free cash flow after absorbing some significant costs - reasons for which we will talk about in a moment; and to know that that's actually generated from underlying improvements in the business right across our group. So it's a pretty encouraging set of numbers.

Just to pick on some of the highlights there. Obviously a pretty big driver of the improvement in cash flow is the growth in our installed base and in particular our fleet of large engines on wide-body aircraft. And halfway through the year, our in-service flying hours were up by some 15% in Trents at the end of the year. That's up by 22% year-on-year, continued momentum.

And it's quite good momentum picture. Some years ago, we were facing a large ramp in volume productions. And how were we going to do that with large engines? Well, this is the third consecutive year that we're able to report a significant growth in production of large engines. And I'm particularly encouraged with our over 35% in actual engines delivered, to nearly 500 engines; with over 500 engines produced; and the run rate of production during Q4 setting us up in the right place for the growth we expect in volume production as we go through 2018. So I'm feeling quite encouraged about that.

At the same time, of course, we all know that when we produce an engine and stick it on an airplane wing, then we make a cash loss. And we've been fairly transparent about that, but the good news is that we are squeezing down on that. And in the year, 40% of the large engines were Trent XWB. And on Trent XWB[-84], we made significant progress at squeezing down on the cash deficit. And we're still on track to get to our break-even goal on that by around about 2020.

The standout performance probably across the group was in Power Systems, where under new leadership in Power Systems we saw a really good recovery in numbers. And I'll talk about that in a little bit more detail in a moment, but this is really driven by rigour and discipline and an execution mindset that is now starting to become prevalent in that business, which is very encouraging.

Looking ahead to the future: Our future is all about new technology. And clearly, we need to be working today on the new technology that's going to enable us to win in the future. And we had a good year with our new big-engine architecture, the UltraFan; and both the core engine and the gearbox that is required to create that architecture going forward. So that was encouraging. Of course, it's all about the people. And it seems like it's been a very long time, but actually just reflecting on it, 2017 was the first year in which we've had a new executive leadership team. And so that team has actually only been out on the pitch for 12 months. In fact, 12 months ago, Stephen was sat on that side of this platform rather than on this side of the platform. And a lot happens in 12 months.

Of course, it's not all been glorious. And particularly, recently there's been quite a lot written about the issues that we're facing with some of our customers on the Trent 1000. And I'll start with that issue. So this is a very important issue for us. First of all, let's just get it in perspective. These engines are mechanical beasts. The engines themselves are perfectly healthy, but mechanical things wear out. And what's happening is that some of the components on the Trent 1000 are wearing out sooner than we and our customers expected. That is causing a lot of disruption for our customers, and obviously we are very sorry. And we work quite closely with all of our customers to minimize the operational disruption, but we have been taking significant steps to do that over the last 12 months.

We've almost tripled our repair and overhaul capacity to deal with the Trent 1000. We've tripled our capacity to provide the vital components that are necessary. And it obviously takes some time for that capacity to come on stream and be effective, which is why we've seen this issue escalate. It is a dynamic situation, and whilst we are managing it on a day-to-day basis, we have not only put that extra capacity in place, we're addressing the issues by redesigning components, and we have plans in place to get all those redesign components in the engines over the next several years. This will be costly. And we are putting in our earnings release this morning the latest estimates of that cost. And the good news is that, even though it escalated in 2017, we absorbed that full cost in 2017. And the latest estimate of our costs are completely encompassed in the outlook that we've come out with today for 2018 and indeed beyond into our medium-term free cash flow ambitions.

Now it wasn't all challenges in our Civil Aerospace business. Actually, not only did the team, I think, do a fantastic job of dealing with those challenges, but they also delivered on some really great achievements. So the ramp-up in deliveries, I already spoke about. The growth of 12% in invoiced flying hours, that is the business model working. We have been working hard over

many years to gain the design wins, and now we're delivering on those design wins and growing the size of our fleet. And when you or I get on an airplane and go from A to B, there's now a larger possibility -- larger probability, rather, that, that is powered by a Rolls-Royce engine. And that is the business model working. And that is why we have a 12% increase in invoiced flying hours.

At the same time, we're not just sitting there and counting the extra flying hours. We're working hard on reducing the amount of money it costs for us to install the engines and continue to grow the size of that fleet. And as we look forward and think about how the business develops in the future and we grow that competitive position even more, then new engines. And during 2018, of course, we've had a peak of new large engines coming into service. And we're very pleased with, over a 12-month period, 3 of the large new engines, the Trent 1000 TEN version, the XWB-97K version and the Trent 7000 for the new Airbus A330neo, they all had their first flights on their airframes. Two of them are now in service, and the third one will be in service later this year. And looking even further ahead, then, good work on new technologies.

As I said, the standout performance around the group was really from Power Systems. And that delivered an underlying profit improvement of over 60%, which is really encouraging. Actually it's more than encouraging momentum, which is what it says on the slide. Last year, I talked about linearization in this business and how it was very back-end loaded historically and how we couldn't make it linear in 1 year, but actually in 2017, we made significant progress at that linearization. And that has contributed significantly to the performance but not at expense of revenue. So revenue has grown by 3% in the business. And that new leadership team are really making significant changes. One of the changes they're making is simplifying, so we've had a significant reduction in the number of products in the portfolio. And that has all led to this meaningful improvement in profitability and cash flow.

I think there is great potential here. There's a massive installed base, and that installed base is of approximately 140,000 engines. It's growing by approximately 20,000 engines every year, and that's a fantastic service opportunity. Now we add some digital technology to that, and we can address that opportunity. Looking forward to the underlying products themselves, of course, these play in markets in which people are focusing a lot on making the engines cleaner and less damaging to the environment. That is a great opportunity for us to deploy better technology and secure our market share with competitive solutions. And I'll come back to that when we're discussing the strategy after Stephen's been talking.

So in our Defence business, a solid year. The Defence business really is characterized by long periods being dominated by service whilst you're tracking new opportunities for OE design wins. Those windows for OE design wins don't open very often, and you need to track and keep on top of them. So quite a lot of this activity is around service and about squeezing more out of the installed base that we have. One of the ways we do that is by getting closer to our customers. So that access box up there is all about extending an agreement that we've had for many years with Aviall, which is now a Boeing company incidentally. And they effectively act as a distributor, particularly in the U.S. for us, with the significant presence that we have there, getting spare parts on the site to make those airplanes available for the U.S. customer as soon as possible. And so having had a little agreement with them for many years, we've extended that agreement this year across quite a lot of the fleet. At the same time, we look at the costs of what it takes to manage our business. And we made significant progress there in reduction of costs of our operations. Obviously, some of these contracts are quite long-term contracts. They cover a lot of engines. And there's obviously nervousness when those contracts come towards the end, and so it's very pleasing to be able to report such a significant renewal of some of those long-term contracts.

I talked about staying on top of the opportunities for new OE. And the good news is that, looking beyond the core home countries of the U.S. and the U.K. for our Defence business, it is encouraging to see some export orders. And the service piece again, in the bottom corner

there, isn't just about signing up deals with distributors. Sometimes, we have to get close to our customers as well. 2 new service centres there for the U.K. MoD.

Progress in some of our other businesses. Well, I'll take Nuclear, at the top of the slide. There's a small piece of civil nuclear, and that's around control systems and service. And the good news is we secured some significant contracts in that business. But most of the Nuclear activity is dominated, in fact, by some unique contracts with the U.K. MoD for propulsion systems for their nuclear submarines. And we've been making good operational progress on that, notwithstanding some, or in fact completely, reversing some of the headlines that you might have read a few years ago in terms of operational improvement. And that makes it much easier for us and also makes the activity a little bit more profitable for us. We've been investing some of that profit in future capability, increasing both capacity and capability for the new generations of nuclear submarines for which the U.K. Ministry of Defense relies upon us.

In Marine, notwithstanding the difficulties which everybody knows about in that sector and for our business, we have actually during the course of 2017 established quite a leadership position in ship intelligence; - autonomous and remotely operated vessels. As most of the people in this room know, we've also been facing serious downward pressure from in fact, the disappearance of the market in offshore for us. And that's caused us to do a lot of work rightsizing the business. And we completed the rightsizing exercise during 2017 with a further 13% reduction in some of our G&A costs. After all that, we still believe that the right thing to do is to have a strategic review of the commercial Marine operations.

Our Naval Marine activity has been good and has been profitable. And I'll talk about that in a moment when we talk about the restructuring that we're proposing, but consistent with the 4-box model that I put in front of people in November 2015, when considering the portfolio and looking at the activities that go on within some of our businesses, then not all of those activities are where we offer a true competitive advantage into a truly attractive and growing market. And there are limits to how much we want to be able to invest in to improve the competitive position, and that's why we're having a strategic review of our Marine business right now.

Just before Christmas, we completed on the acquisition of ITP. So this is a long-term joint venture with Rolls-Royce, and we took over full ownership just before the end of December. So I think more on this as we go forward. A significant point to note: when the put option was announced, one of the advantages is that they're a risk and revenue-sharing partner for us. And we've been through a lot of the risks on XWB and the development that they've done on XWB. We're now coming into the revenue bit and so this is a great opportunity to actually capture 100% of that revenue flowing through that risk and revenue partnership rather than just 50% of it, which is where we were before. So I think that's the sort of the good news part about acquiring ITP. Meanwhile, we're working through getting our heads around the rest of their business. It will be continued to be reported at slightly arm's lengths like that. That's a contractual obligation as the business does do a certain amount of activity for our competitors, and for that reason, we won't be integrating it fully with the rest of the group.

Now I want to step back, change gear for a moment or two and talk about group-level priorities. These are the priorities that we set 12 months ago, and I'm just going to quickly whiz across the chart here. Of course, there are actually six priorities, not four, because the box on the left is a cheat box containing three, where we strengthen our focus on engineering, operational and service excellence.

Switching to the first of these boxes, engineering excellence. So there are 3 stages. You have science, technology and then engineering because engineering is all about taming science for our benefit. And the good news is we're making significant progress in all of those 3 areas. During the year, we did a bit of restructuring with our engineering and technology organization; and pushed engineering, the right-hand side of the chart, much closer into our businesses. So we took away some of the central engineering, put it closer in the businesses, closer to the

customers, closer to the projects and programmes that really matter. That's the engineering end of it.

Meanwhile, coming back towards the left of the chart, the technology piece, we created a Chief Technology Officer. And that has enabled us to get a lot more focus on future technologies and addressing things like the change in mix of skills that we need over the next decade or so; adjusting the balance between thermal and mechanical, pretty much thermal and mechanical only, and a little electrical; and tilting that balance; and getting our skill set a bit more aligned to the future.

Operational excellence. Well, clearly, we continued the modernization of Rolls-Royce production facilities, more investment going on there, more use of up-to-date technology. And that enables us to do things like deliver on the promised production ramp. We need to worry about how much it costs us to produce all those more things, and so clearly we have a lot of activity focused on how we improve productivity. And there are all sorts of examples such as the ones shown on the slide, where some of them are incremental improvements in productivity. Some of them are like the example on the slide which is completely transformational, a task which was done in one way and has been done in that way for many years now being done in a completely different and modern way. And when we roll out more of those sorts of things around the business, we'll see more productivity improvement. In terms of operational excellence, it isn't all about manufacturing. Some of it is just rigour and discipline and an execution mindset in managing the operation. And that's delivered the excellent increase in profitability in our Power Systems business, shown on the right of the slide there.

Service excellence. This business is about installing engines, whether they're on airplanes or whether they're in other pieces of kit. And then they go into environments where it's absolutely necessary for that engine to perform and generate useful power. And so this is where the service opportunity comes from. So clearly we've been active in doing things like power-by-the-hour in our Civil Aerospace for many years. And one of the things we've done recently is put in region close to our customers some of these service centres. And in fact, I opened the final move in that sequence in the Middle East last week.

In terms of the focus on providing that service, we also need to worry about how much it costs us to provide the service, not just to be very nice to our customers. And so we continue progressing on reducing the costs there.

And then if you look across our business. We can actually take some of the lessons that we've learned over many years in Civil Aerospace and apply it to other parts of our business. So in Power Systems where we have that massive installed base of 140,000 engines, growing by a significant number each year. And so what we've done is actually take some people out of the Civil Aerospace business and replicate the model in our Power Systems business. I mentioned 12 months ago that we were going to do that. We've done it, and we've secured the first really significant long-term contract deploying that approach.

We obviously talked quite a lot over recent years about a transformation programme and saving GBP 200 million of costs on an annual run rate by the end of 2017 - there were progress reports underway. That's now behind us, and it's done. It wasn't all about cost reduction. It was a little bit about simplicity as well. And the good news is that we have achieved some progress on simplicity, but we have a lot more to go. There is more complexity in the business. And that is why we've announced the next piece of restructuring and simplification around our business.

The next priority was around rebuilding trust and confidence. And I think there I'm very pleased that in the main we have either delivered on what we said we will deliver, green boxes. Or at least we've been transparent when some of the delivery has been delayed - the orange boxes on the slide. And I don't think I need to go into more detail than that at this stage.

Another builder of trust and confidence is really “okay, so that's all glorious, but ‘show me the money’”. And we have been consistent about talking about growing cash generation in this business. And then when we presented our results 12 months ago, we first talked about GBP 1 billion of free cash flow by about 2020. We're still on track to do that, and the building blocks which enable that to happen are still absolutely in place. And very simply, it's about making more money come into the business and stop money leaking out of the business, or reduce the amount of money leaking out of the business.

And so yes, we are seeing the business model work - increase in engine flying hours. Good news, we are seeing an increase in cash from improving performance in non-aero businesses. Yes, we are seeing reductions in cash outflows right across through whether it's the cash we spend on delivering engines or whether it's the cash we spend on indirect costs elsewhere around the business. It's all very well to talk about a fantastic service opportunity, but of course this is also an opportunity for money to go out of the door, and so we need to focus on reducing the cost of delivering on all of that service. And it's very easy to spend an awful lot of money in this type of business on investing in technology and R&D, so we pay careful attention to the allocation of capital there. And I think the goal that we have set out before about that being broadly flat over the coming years is absolutely intact.

The final priority I had last year was about developing our long-term vision and strategy, and I'll talk more about this after Stephen has added some colour to the numbers. I will return to that very slide.

So I think, to summarize on this section. I think we have demonstrated good progress in at least 3 out of the 4 boxes. And probably the fourth one there with the question mark is not really for us to judge. That's more for you. But I'm quite pleased with the progress in 2017.

Now over to Stephen.

Stephen Daintith, CFO: Great. Thank you very much. Thanks, Warren.

Morning, everybody. Apologies in advance for the large number of finance slides, but as a relative newcomer - and there's a lot of really interesting things to talk about at Rolls-Royce - so if you'll forgive me that. And I'll go through, but we're trying to add a bit more granularity and transparency to our numbers as well to try and sort of lift the fog a little and bring the business to life. So hopefully, you'll appreciate the extra slides that we've slotted in.

So there's the order.

The full year results. I think the first number I always look at is revenue growth. Warren talked about momentum, good momentum within the business. I'll go into the revenue in a bit more detail on the next slide. A little bit of gross margin compression due to the OE mix as a proportion of revenues. That's the big driver there. But encouragingly, growth in free cash flow as we head towards that ‘around GBP 1 billion by around 2020’. So I think encouraging results all around.

Looking at the revenue growth. And the way I sort of look at the business is of 3 core revenue streams. We've got the OE revenue; the long-term service agreement revenue; and then the other service revenue, the time-and-material type service revenue. And again, what I think is to be liked about on Rolls-Royce is the visibility, the very good visibility in particular, about the first 2 revenue streams. The OE revenue - we've got good visibility of the order book and pricing on the order book and so on. Long-term service agreements 4,400 installed engines, growing to over 6,000 engines over the next few years, good visibility around that. And still good visibility on the other service revenue, less so than the first 2 but still good visibility there as well. So there's good visibility of revenues, strong growth across all 3 revenue streams and the gross margin compression that I talked about, just running through those numbers. Good growth across all 3.

Moving into the next line in the income statement, research and development. Our gross research and development actually increased by a little bit year-on-year. After third-party contributions, our net R&D spend, that's that GBP 1,035 million number that Warren showed on his earlier slide, up 7%. Amortization, we add that back on as a cost; and then the amount that we capitalized up on last year, which I'll come to in a second; and then the risk and revenue sharing partner contributions, getting us down to a charge that is somewhat lower than last year on an income statement basis but clearly at the gross level and on a net level higher than last year.

The increased investment is largely in Civil Aerospace, 3 wide-body engines entering or engines in service, the Advance development programmes that Warren mentioned and then the UltraFan making up the key components of that increase and the key part of the GBP 1 billion in total. In 2018, we expect net research and development to increase by around GBP 50 million year-on-year. And so those are key numbers there.

So looking at Civil Aerospace research and development in a little more detail; the UltraFan is targeting 25% fuel efficiency. And we've also taken the opportunity to look at the application of our research and development policy; and bring it in line with our peers, particularly MTU and Safran. And what we've done is we've started capitalisation a little bit earlier in the process, and we're ending capitalisation a little bit later in the process. And the impact there in 2017 was GBP 83 million, taking it up to total capitalisation of GBP 342 million in the year, rising to around GBP 400 million in 2018. It's around better alignment with industry practice.

Looking on to commercial and administrative costs. We have around GBP 1.2 billion of C&A costs in our income statement. And I put on the right-hand side there what the key lines of expenditure are: general management, comms, finance and so on. And I will say that, the initial phase of the restructuring programme that Warren mentioned, the focus will be here. There'll be several waves to the programme. And we'll tell you more about this and share more with you at our Capital Markets Day in mid-June, but the strapline that we're using is a "lean corporate centre and empowered businesses." And so the first phase of attention will be very much on C&A costs of the GBP 1.2 billion that we're highlighting today, which is pretty much flat year-on-year.

Looking at our group cash flow. So what are the material drivers of the GBP 173 million growth in free cash flow? Well, first of all, we have cash outflows from the high installed engine production in Civil. So whilst we continue to make progress on engines like the XWB-84, the average cash margin, as we'll see shortly, is flat year-on-year at GBP 1.6 million. And we're actually building and delivering more than the previous year, than in 2016, so there is an increase in the cash outflow as a consequence of that. On the other hand, though, we get increased cash revenues from the aftermarket growth. We'll see that in a little while in the Civil Aerospace cash slide. The Trent 900, 1000 engine issues, GBP 170 million of cash outflow in 2017; doubling to around GBP 340 million therefore in 2018, as we've highlighted today. That's a drag on cash flow.

The strong Power Systems margin improvement, good cash flow improvement in Power Systems in both profit and in working capital management, as we'll see later. A little more increase in capex on facility modernization to cope with the ramp-up in production and to deal with the engine issues that we've talked about a little while ago. Higher future programme R&D investment, again mainly in civil, but improved working capital management, which is a part of doing business within Rolls-Royce and then a feature of our business, which we'll talk about later. A little bit more tax largely due to the change in mix of -- the geographical mix of profits but then slightly reduced pension payments, getting us down to the GBP 173 million increase in free cash flow.

We're guiding today to around GBP 150 million, plus or minus GBP 100 million, in 2018. That excludes ITP. We completed that on the 19th of December; that is looking at a cash outflow in

2018 of around GBP 50 million, but then we have indicated moving to around a break-even position in 2019, so that's a short-term cash outflow for that business.

So business unit review, going through the businesses one by one.

Civil Aerospace, 12% growth in OE delivered, of course, by that large growth in engine deliveries; long-term service agreements - 10% growth. The flying hour growth there, Warren mentioned the 12% growth; and the in-production Trent fleet growing at 22%. So very good growth for that business. 17% growth in time and material revenues; so good growth across all 3 revenue streams giving you that 12% overall, but a gross margin compression driven again by that OE mix change and the impacts therefore within the numbers on Civil Aerospace, because we do sell our engines at a deficit and make the profits then in the aftermarket on those long-term contracts.

Trading cash flow is flat year-on-year - and I will show you a breakdown in a little while of just how that moves, all the various moving parts to get you to that flat performance year-on-year.

Looking at those drivers then. Underlying revenue growth - and I've run through many of these already - deliveries up 35%, 12% growth in flying hours. The wide-body fleet is now 4,400. And business aviation services, we don't talk an awful lot about our business aviation services, but it was a very strong aftermarket here - up 18% revenue growth. The gross margin reduction driven by the OE mix, growth in wide-body and business aviation services. And within the gross margin as well, of course, is the GBP 170 million of cash costs in respect of the Trent 900 and 1000 that I'm sure there'll be quite a few questions on later in this session.

So the operating margin: a slight improvement reflects the gross margin decline but it also has increasing benefits from, of course, the capitalisation treatment and that extra GBP 83 million as a consequence of doing that. And C&A costs were a little bit higher due to some restructuring provisions that had been taken in the year.

Looking then at the cash drivers in Civil, and this is building on a slide that we shared with you back at the half year. So the 3 key drivers are, first of all, the OE economics, the cash margin per engine sold. A key driver here to watch out for is the Trent XWB-84. Why are we highlighting the XWB? When we see the order book in a little while and the size of the order book and the profile of it, the significance of the XWB to that future order book highlights the significance of this particular measure. Service value will be driven by the growth in the installed engine base, growth in flying hours, the efficiencies of shop visits. And then cost management and capital, focus on operations, C&A costs. This is the cost base getting our overheads under control, putting rigour into our capital allocation decisions and continued working capital management.

So looking at our engine deliveries - 35% growth. We're guiding today to around 550 engines delivered. And these are engines delivered, that's invoiced. We built just over 500 engines in 2017. And I think, in 2018, we'll be heading towards building around 600 engines or so to deliver those 550. So record levels of wide-body deliveries, 483 moving to 550 next year.

Looking at the economics then, the XWB. We highlighted in 2016 a 7% compression of the deficit; and now 37% in 2017, largely price driven rather than cost driven. Of course, we would rather it be more cost driven than price driven, but we will take the benefit. And we do see the route through to the break-even position by 2020, and this chart here just sort of highlights that in a very simple way.

And what causes the drag, therefore, on the margin, staying flat at GBP 1.6 million? So notwithstanding the progress on the XWB-84, the Trent 900 has some temporary pricing impact that's dragging the gross margin down. And the Trent 700 has had a good year of sales as it enters its final couple of years of its OE experience, so to speak, of its selling experience. And there's some pricing discounting going on in its final couple of years as it heads towards the

becoming a sole aftermarket product. And there's a bit of pricing going on there to compress the margin as well. So those are the 2 drivers to flat year-on-year.

Looking at the fleet performance. So the in-service fleet, large engines 7% growth; and the Trent fleet is 11%, to 3,300. The flying hours 12% across the wide-body fleet. And the in-production fleet growth is 22%. That's up on the 15% of last year and the 15% that we reported at the half year, so good momentum within the Trent in-production fleet.

Overhauls. This is an interesting piece of data. And as we look forward, we'll get familiar with this and how sensitive our cash trajectory is to the number of shop visits that take place in the year. And just for absolute sake of clarity, these are the overhauls, the scheduled long-term service agreement overhauls that take place every sort of 5, 6 years or so. So flat year-on-year at 240 and despite the growth in the installed fleet. I should point out, though, there's a number down here at the bottom left, that 350 - 350 check and repair overhauls, and that includes hospital visits as well. So for example, the Trent 1000 shop visits will be within that 350. The 240 is more the regularized schedules, long-term service agreement shop visits that we anticipate. And the bit in the bottom left, they will be very small check and repair overhauls, but there will be a bundle in there that are the Trent 1000 and 900 shop visits - just for the sake of clarity.

So trading cash flow. So this is the 2017-versus-2016 comparative. How do we get to that flat performance year-on-year? So the 444 original equipment at GBP 1.6 million gets you to 0.7. The spare engines gets you to the 483 total. 12.6 million flying hours gets you to GBP 1.3 billion of aftermarket cash margin compared to the GBP 1 billion in 2016, so you can see the wide-body cash margin growing from GBP 700 million to GBP 800 million. Business and regional, flat year-on-year at GBP 700 million; V2500 around 300 million; and then certain operations and engineering costs taking us down to a cash gross margin of GBP 1.1 billion. C&A, GBP 0.3 billion, GBP 300 million. R&D, rising a little bit to GBP 700 million. Capex, up a little bit to GBP 500 million. Working capital benefits, which we'll talk about a little later, gets you to that trading cash flow performance.

So you can start to see the key drivers of free cash flow very much around those top 2 or 3 lines that get you to the wide-body cash margin. So let's look at those in a little bit more detail.

What we've tried to do with this slide is show some of the likely trends over the next 5 years. And again, I would emphasize the point that it will not be linear, so we just shouldn't next be looking for these sorts of growth rates exactly on a linear basis. They will be lumpy, but we're pointing to around 5 years from now what might the world look like. And just before we get into the chart, looking at the bottom left there as well. We've indicated what the order book looks like. So to put it in context: again, the significance of the Trent XWB; and 2,500 engines on order, so good visibility - going back to that point about the visibility of revenues. And 1,400 of that 2,500 is the XWB; and that visibility helps us therefore when thinking about over the next 5 years what the growth rates might be.

So installed engine deliveries of 444 in '17. 39 gets you to that 483. We're looking at around 5% compound annual growth rate over the next 5 years for those two. Cash deficit per engine, currently an average of GBP 1.6 million. We're aiming to get towards GBP 0.4 million cash deficit per engine by 2022, or over the next 5 years or so. The in-service fleet, 4,400, we think, is going to be growing at around 8% on a compound annual growth rate over the next 5 years. Invoiced flying hours, in line with the growth in the installed fleets and our projections on traffic and so on, growing at around 10%. And then the shop visits will grow in line with the growth of the installed base. And these are the long-term service agreement shop visits, going back to that 240 comparable that I ran through a second ago. Broadly stable R&D and capex; and commercial and admin costs, we put stable. If anything, we'd hope to see reductions here, stable if not reducing on commercial and admin costs.

So these are the key drivers for Civil Aerospace over the next 5 years.

Very quickly running through the programmes - and Warren did make the point as well - we talk and with very good reason around the 900 and 1000, but over 80% of the fleet is flying very well. The Trent 700 in particular: 1,600 engines in service, 9% flying hour growth in the year and a very good dispatch reliability. The Trent 800: good performance there, smaller part of the fleet, 13 aircraft transitions in 2017. We had a higher point of transitions in 2017 than ever before. We've been pretty successful in transitions during the year. Trent 7000 came into service during 2018. And then the XWB-84 total cumulative flight fleet hours have now gone past 1.2 million flying hours.

We have, however, had significant issues on the 1000 and the 900. And I'm sure we'll go through this in some detail in the Q&A. And we are highlighting today a GBP 170 million cash cost across both engines. About GBP 120 million of that is in the 1000, and GBP 50 million of that is in the 900. And we highlighted also the in-service cost issues, the GBP 179 million and GBP 48 million. I will talk about that, I'm sure, during the Q&A.

Power Systems, the standout performance, I think as Warren said, across the group; and good revenue growth, 3%, particularly in service revenue; and a terrific improvement in profitability. And that flowed through to cash flow performance as well and not just through profit growth but it's also through working capital management.

The chart on the left here just puts the performance of Power Systems in 2017 into very stark numbers; and 11.3% return on sales; and record revenues and profits for Power Systems in 2017. So a relatively new leadership, a reinvigorated leadership team at Power Systems and, as we'll see in a second, tackling the business on a variety of fronts. So good revenue growth, a better H1-H2 mix in the business, helping improve both margins but also factory utilization. R&D spend, down 6%; real focus and rigour around R&D spend and on C&A costs as well. So a really good knockout performance in Power Systems across a variety of fronts.

I won't dwell on the details here, but these are some of the details of the performance improvements on a performance push but also structural cost reduction as well. Over the last 2 years, a 30% reduction in product variants in Power Systems. So these comparatives are '15 v '17, just in case you're looking for numbers consistent with the rest of the pack. And the focus across a variety of fronts, at the bottom there.

Defence, a resilient performance, reporting revenue down just 1%, so a pretty solid performance. Operating profit, a little bit down on last year; a little bit of margin compression there. Largely impacted by lower long-term service agreement life cycle cost reductions; the 2 or 3 big programmes in the U.K. defence fleet coming towards maturity, the Sea King, which retired, the Typhoon, Tornado, dampening profits there to an extent. As we go through those drivers, OE revenue is up. Transport & Patrol in the U.S. in particular, have done well, partly offset by lower combat sales; and then growing combat services in the F-35 LiftSystem. But then I've mentioned the Sea King fleet retirement; hitting the export market. The gross margin, adverse mix there, lower legacy spares volumes and lower one-off long-term service agreement releases than previously. We do, however, benefit from the non-repeat of the last year's TP400 charges, GBP 31 million, in there. R&D costs are up 10% as well as we developed the future transport programme spend, and that's around the Advance programme that Warren mentioned.

Looking at an overview of Defence and the markets. We have a strong position in the U.S. - renewed that USD 1.4 billion of contracts that Warren alluded to; and there are some headwinds in the U.S., the growing impact to the U.S. Department of Defense pricing regulations. The U.K. is a similar market, and it has those single-source pricing regulations, the tightening of the Ministry of Defence budget in 2010, Tornado retirement, a Typhoon contract ending shortly. So the U.K. is a little tougher market.

And the export market has been a tough market for the Defence business as well in 2017. And we saw it continuing to an extent in 2018, but there are some good export opportunities, and I'm sure we'll get through those in the Q&A.

Marine and Nuclear, I won't dwell on these numbers. Marine continuing to operate in tough markets, down 9%; but costs are down by 13%, delivering that flat year-on-year performance. And you'll have read about and we'll be talking more about our strategic review. In Nuclear, revenue is up 4% but higher spend on SMRs in 2017.

IFRS 15, quick word on this. Just a reminder, no change to cash flow from IFRS 15. We welcome this new accounting standard. I think it makes it easier to understand our business without the distortion of the capitalizing the OE losses. And there's, as you might expect, a greater connection between profits and cash flow as a consequence.

I'll highlight down here in the box at the bottom right, the greater forecasting challenge in the Civil aftermarket; around not the revenue scene but around sort of the profits and in its own way, the number of shop visits that are going to take place each year. So rather than under old accounting [being] on a flying hour basis, revenues and profits will only be recognized when a shop visit takes place. So that would be the big difference in the sensitivity of the phasing of the overhauls but also the mix and the workscope of the overhauls as well, the type of work overhauls to take place. It's the first year of adoption; we're still learning, but it will bring much greater transparency to our business.

The impact in 2017: so the 2017 number, operating profit of GBP 1,175 million - the reduction is GBP 854 million, getting us to GBP 321 million of profits in 2017 on the new basis. And that is the basis now that we're working towards as we give our guidance for 2018 profits of around GBP 400 million or so. And the key driver of the difference in store, in very simple terms, the absolute material key driver is that the GBP 700 million widebody cash deficit, [which] now flows through our numbers immediately on sale, rather than being capitalized and amortized over the life of the contracts.

Here are the major drivers: the volumes, costs and so on. And then the service revenue and margins, well, these are the key items that we will make profit and revenue flex according to actual performance.

One thing that we should make clear, long-term contract accounting doesn't go away completely because in the aftermarket, we still have to take a view on the long-term contract percentage, margin percentage of each contract - that still comes into play - so there will still be that element there. We don't completely lose that aspect of long-term contract accounting.

A couple of other accounting issues on the horizon. IFRS 9, no material impact - this is around just simplified accounting for financial instruments but no real material impact for Rolls-Royce. IFRS 16, with effect from the 1st of January next year, will be bringing all of our leases onto our balance sheet. And at the half year, we'll share more details with you on how that impacts our numbers.

The rating agencies, in case the question comes up, are already familiar with this and look at free cash flow and take this number into account in any event as they assess the health of our business.

Outlook and guidance: we put this table in the pack this morning. We thought it's helpful just to summarize it all in one place. We are looking at mid-single-digit revenue growth for the group. Group operating profit of GBP 400 million, plus or minus GBP 100 million, building from the GBP 321 million. And we've gone through each of the divisions line-by-line there just to explain how we get broadly to that GBP 400 million. And free cash flow, at GBP 450 million plus or minus GBP 100 million. And all of these numbers accommodate the known issues on the Trent 900 and 1000 that we've talked about in our release today.

We have excluded ITP from the numbers below just so that you can see a comparison with the business that you're familiar with today. Just throwing ITP into the mix will reduce cash flow by about GBP 50 million, but it'll increase profit by about GBP 50 million. So just to put context around that as we look into 2018.

Commentary slide - I won't repeat the commentary. This is what's all in the pack for each of the businesses; and this is the format that we'll be using at the half year when you'll see the business under the new 3 divisions set up, ITP in there, and then whatever we do with the other and eliminations to get us to a group continuing basis. And that's the shape of the portfolio.

Key drivers to get us to the GBP 450 million, and Warren has pretty much gone through these, so I won't dwell on them. But the large driver there, increased cash revenues from the aftermarket growth. And we will continue to see further working capital improvements.

Dividend is held steady at the same level as 2016. It's part of our overall capital allocation considerations. Our Capital Markets Day in the middle of June, we'll look at capital allocation, returns on capital as well as looking at our progress on our restructuring programme. When we look at our dividend, we're making the conscious linkage to free cash flow. And the growth in free cash flow will be the guide for us to the appropriate time to review our dividend policy and revisit that.

So in summary, good performance, encouraging results. These are the priorities that I sort of set myself when I highlighted at the half year, areas that I'd be looking at. I think just a couple of things on this. Costs: restructuring has been announced. Cash: I hope you'll see some enhanced analysis of cash flow. We've changed the internal language as well. We went through our budget process, medium-term plan process, recently, and what absolutely delighted me - I didn't realize it that at the end of the process - we didn't talk profit once throughout the whole process. The whole senior management team had a slight crack, "maybe we should have thought about the profit number." But it was cash which is the internal language.

And the incentive schemes as well. We've now moved 75% of the weighting of our management bonus schemes to cash flow, which I think is an encouraging sign. Clearing the fog, hopefully, the drivers of performance that I've highlighted there are helpful there.

Balance sheet and capital allocation: we've introduced the new investment approval process. We're looking at return on capital targets that's for the Capital Markets Day. And then the finance team: 4 clear priorities for us to 2018. And one of those that I'm somewhat embarrassingly very excited about is value-based modeling, which is a rolling 5-year forecast, a real-time rolling 5-year forecast across the group on a driver basis. And I'm told that we're going to see some very exciting results in 2 weeks' time as to where we've got to on that one, with a whole bunch of metrics that drive a 5-year view of the business. So working on that.

In summary, delivering priorities, improving financial performance, our focus on cash running throughout the organization, and the restructuring programme will help drive further pace and simplification and efficiency.

Thank you very much.

Warren East, CEO: Thanks, Stephen. Just a few slides of summary here before we do questions.

First of all, returning to the vision and strategy. So we said we'd address this during last year, and we did. And if you look at Rolls-Royce, well, a lot of our business is about aerospace. And what that means is that we have great domain knowledge in the aerospace world, but it doesn't necessarily make us an aerospace company. In fact, when I go around and talked about when I first joined the business, I talked to lots of people around Rolls-Royce and asked them about

what's Rolls-Royce really all about. And the answer is about power. And basically, I express it as converting stored energy into useful power. And that's what we do across all of the applications that we serve through all the different types of engine that we produce. And historically, a lot of that has been around better performance and better costs. And increasingly, as we look forward, it's around more efficiency and cleanliness and attention to the environment.

So we rephrased our vision as around 'pioneering the power that matters'. And that's because if I look at how we've done that historically, it's always been around using the cutting-edge technologies of the time. Actually, there's no reason why that shouldn't continue going forward. In fact, as we address issues like creating cleaner, safer, more-efficient engines, then we have to embrace the best cutting-edge technology. So that's the summary.

So how do we go about doing that? Well, down at the bottom of the slide, we talk about a balanced portfolio. And you've heard this from Rolls-Royce before, and we've talked about long-cycle businesses and short-cycle businesses, and that's kind of 'business 101', financial common sense. But actually, each of these businesses uses slightly different technologies, and the technologies flow through. And what is important to one type of business and one market sector at one stage perhaps applies at a different stage, a different time in another sector.

And so included in the balance, as far as I'm concerned, is flowing of technologies through the different markets and businesses that we serve and exchange in both directions and exchange of the way in which we go about to execution as well. So for example, in our Power Systems business, there is an awful lot of electrification. Electrification is an inescapable trend in industrial markets today. And that includes in Aerospace, in due course, but it's actually present today in many of the markets that we serve through our Power Systems business. And so there's a clear flow of taking the electrical systems expertise that we developed and practice with real customers and real applications and tough environments in our Power Systems business. We take that system expertise in one direction, and we map it into a domain expertise from aerospace in the other direction. And so that's what championing electrification is all about.

At the same time, of course, electrification is not going to hit widebody airplanes in the mainstream for many years. And so it's absolutely essential that we remain cutting-edge in terms of our gas turbine capability. And that's what vitalizing our existing capabilities is all about.

And then how do we go about delivering all that? Well, it's about embracing things like more digital technology today. And a lot of that isn't just in the service end. Some of it is in the design end of our operations, linking our designs with our suppliers and with our customers. So that's what reinventing with digital is all about. And a good example of that applied in service and an example of applying that to the balanced portfolio is the way I talked earlier about taking the service model out of our Civil Aerospace piece and moving it into our Power Systems business.

And then generally transforming our business and modernizing it and making it fit for the 21st century - this is what the box on the right-hand side of the chart is all about, and there's a picture of applying optical measurements instead of mechanical measurements in our production process.

So the other sort of big picture thing that we've done is talk about restructuring our business from 5 to 3, and I just wanted to a little bit more depth on what we've done there. So if you look at the top line, our 5 businesses; and the 2 on the right-hand side, Nuclear and Marine. Well, we've taken the submarines part out of our Nuclear business, and we've put that into Defence, the customer is the same, and so it's an alignment with customer. And we've taken the services and control systems piece and plugged that into the services and control systems pieces within our Power Systems business because it's a similar type of activity on the one hand and a similar type of technology and product on the other hand.

And in our Marine business, then we've moved the Naval Marine piece, a profitable cash-generative piece, into Defence. Again, customers are the same, and so alignment with customers. And we do have a strategic review on other parts of the Commercial Marine operation. But be under no doubt that we will continue to operate in the Marine sector. In fact, through our Power Systems business, that includes a lot of marine applications, a lot of marine customers and a lot of electrification opportunity in the marine sector.

We set ourselves some priorities for 2018, and we'll go through them all now, but clearly oriented, you should read this chart like a clock, starting with customers because they are people that actually pay us the money. And if it wasn't for customers, then we wouldn't have any business. But we do need to focus on that cutting-edge technology so that we develop the best solutions for our customers, and that technology has always been the foundation of our business and will continue to be so. Of course, it's a business, and so financial progress is really important not only so that you guys can feel happy but also so that we can generate enough cash to invest in the future of our business, make it more resilient in that resilient box as well as the output from the financial piece. We have the people piece because the people are the key differentiator around our business, and it's all about values and behaviours.

So summarizing. In 2017, encouraging; 2018, we think it's going to be a year of significant progress. We've got some clear priorities for the team. And as we look forward, we remain pretty optimistic about the future, growing market share into growing markets and growing profitability.

And with that, we'll deal with whatever questions you may have.

Q&A session

Christian Laughlin, Bernstein: Warren, I have a 2-part question about cash flow actually. So kind of starting more tactically, versus last year, ostensibly, things look a lot better given that you're giving an outlook for positive trajectory in cash flow in 2018 whilst absorbing several hundred million of what was presumably unanticipated costs last year this time relating to 1000 and 900. So if you could talk a little bit specifically about what are the positive offsets within that guidance, particularly in this coming year; and then more broadly, over the next several years, from just a higher level, how the restructuring progress has impacted the building blocks you've previously talked about towards about GBP 1 billion cash flow or so target in 2020. And apologies, maybe this is in Stephen's lane right now.

Warren East: Okay. So Stephen's going to answer the first bit.

Stephen Daintith: Yes. So just to clarify all the numbers, we've highlighted GBP 170 million in 2017 on 900 and 1000 doubling to the peak year next year of around GBP 340 million. And notwithstanding that, we're reporting GBP 450 million free cash flow. So one might do the sums and think, "Well, if it weren't for that." I think a couple of things. We carry within our guidance and, indeed, within our business plans around GBP 100 million of cash contingency within our numbers for engine issues in any event. So that automatically brings the number down a little bit. What are the positive contributors? Well, I think we've pointed to it really, I think, in the slides that the aftermarket growth is a big driver of the cash flow performance.

And also, at the same time, it is the reduced OE losses is another key driver and working capital benefits, as we've reported today, around GBP 550 million of working capital. It is the nature of our industry, the negative working capital aspects of particularly Rolls-Royce as an OE manufacturer, that there are customer deposits we take in advance. And when we invoice our customers, the airframe, as we invoice on a gross basis and we pay the concession fee, later, the discount fee to the operator; and 2 or 3 months later when the engine is in service, so you will get in a growing business, you'll get that benefit over a cutoff period at the year-end, for example. And the growing business, you'll get a year-on-year benefit there as well. So those

are the big drivers, those positive contributors. And the next question was around the GBP 1 billion, wasn't it?

Christian A. Laughlin: Well, basically, just kind of from a higher-level perspective, and it's something Warren's talked about a lot over the last 18 months, building blocks towards the target of 'around GBP 1 billion around 2020' or so. So just in tying that into the progress you've made just in the last year and the restructuring, how that ties into the specific building blocks, if that makes sense.

Warren East: Okay. So I mean, I think over the last year, it's been pretty much according to plan. I mean, arguably, yes, we probably didn't have quite as much in our own minds as contingency, as Stephen just spoke about, for the engine issues, so we, arguably, we could be a little bit ahead of, perhaps, the plan. But we always did say 'about GBP 1 billion by about 2020'. And a lot of good things could happen, and we'd be ahead; and a lot of bad things could happen, and we'd be behind. So I think we're broadly on track. In terms of restructuring, well, 5 units to 3 units is undoubtedly less complex to manage. And simplicity is a fundamental plank of what we need to do to modernize this business and make it competitive.

I think in terms of restructuring, how does it affect the fundamental building blocks? Well, anything we can do on simplicity can improve cost, and that is helping us achieve the closing of the cash deficit on OE sales, and that's a key plank of the driver to GBP 1 billion. It's going to help improve the cost of service, and that's also a key plank on the driver to GBP 1 billion. Difference between '17 and '20 is roughly 2/3 of it is Civil Aerospace, those 2 blocks. It's clearly going to help us also with the other piece, which is group-wide general costs, G&A expenditure. And it enables us to put more focus on technology, and so delivering better into the future.

And one of the other things that we hope to achieve through the restructuring isn't just moving pieces around our organization chart, it's actually changing what it is that people do on a day-to-day basis to make it easier for them to do their jobs on a day-to-day basis and inject, perhaps, group-wide some of the rigour, discipline and execution mindset that we've seen so strongly in our Power Systems business in 2018.

Jaime Rowbotham, Deutsche Bank: Two from me: one on trading cash in Civil; and the other on XWB. Stephen, looking at Slide 40, the way you've presented the trading cash from Civil, that's very helpful. Just thinking about the dynamics going into 2018, I think you've guided elsewhere that the cash loss on OE probably steps up again in 2018. Clearly, aftermarket underlying should also go up in a positive way but offset by the in-service cost step-up on Trent 1000. Do you actually see a positive delta on Civil trading cash flow in 2018 contributing to the step-up in group free cash flow to GBP 450 million?

Stephen Daintith: You touched on a good point. Yes but not materially for the very fact of the OE. The OE margin reduction will take time to flow through. So that's why we're using sort of 2020 sort of breakeven. So it's a good point. And yes, it will grow, but you shouldn't be expecting material growth in cash flow in Civil on the year.

Jaime Rowbotham: Okay. And just on XWB, could I ask how the ramp-up is going on the - 97K compared to 84K? I think we've seen some airlines switching their orders from the -1000 to the -900 of the A350, United and Cathay, I think, just at the end of last year. Presumably that whilst that's a boost to you achieving that breakeven on 84K by 2020 that you showed on the slide, it's perhaps a slight hindrance to achieving breakeven maybe a couple of years later on the 97K. Anything you can say on that would be helpful.

Warren East: Yes, well, we've seen a small amount of that sort of order shifting. And frankly, I sat here before and talked about small changes in the order book are inevitable after a period of such exuberant ordering. But now that the 97K is in service, then we don't actually see any issues as far as ramp-up is concerned. Volumes will continue to be dominated by 84K. But I don't see any signs on the horizon of a material change in the shape of the 97K backlog.

Robert Stallard, Vertical Partners: A couple of questions. In your slides, you noted that the shop visits are expected to roughly double over the next 5 years. I was wondering if you could give us some idea of the profile, how that's likely to pan out over the next 5 years and the likely cash implications. And then maybe, Warren, one for you. Boeing, talking about the NMA, a lot of talk about that potentially entering service in the middle of the next decade. What's Rolls-Royce's latest position with regards to that potential programme and your interest of being on that plane?

Stephen Daintith: Yes, so on shop visits, so the 240 rising to around 600 or so, and that is a reflection of the installed fleet. I think you'll see it more sort of start to accelerate in the later of those years rather than in the earlier of those years. We have a relatively high proportion of young engines, so to speak, and that will therefore lead to -- but then it will pick up as they start approaching their first shop visit, as you would expect, after sort of 5 years or so. So that's that. And the sort of the cash implications - well, we're investing hard in our services space generally to better understand engine performance. And a large part of our digital drive is, in fact, looking at engine health performance and then being able to better anticipate having the right parts in the right locations when the shop visits take place. So we'd hope to see some improved economics there. But net-net, whilst one might see around the time of the shop visits a reduced cash margin as you might expect, in absolute terms, you're going to see very good growth just driven by the growth in flying hours to that high number from the 12.5 million flying hours today.

Warren East: And the second question on Boeing and the NMA, well, right now, there continues to be a lot of discussion about that, but there's no committed programme. We're in the business of selling engines, and so naturally, we would want to go after that opportunity. Now if it makes commercial sense as an individual opportunity to pursue that, strategically, it makes perfect sense for us to go after that, and that's what we're doing.

Rami Myerson, Investec: Two questions. The first question is around the order book. The slide you put up, you got 2,500 engines in order. And based on your planned production rates, you will probably exhaust that order book or a similar amount within the next 5 years. And order intake for Trents has not been particularly strong in recent years. So yes, how do you think about order intake momentum or book-to-bill over the next few years would be the first question?

Warren East: So I think, actually, over the last 18 months or so, book-to-bill has held up remarkably well. And a bit like the answer to the previous question, after the exuberant period of ordering, we would absolutely expect to see the absolute size of our backlog decline. But as we look at airline customers and their plans to modernize their fleet, then subject to what happens in the competitions, we don't see a problem with replenishing our order book, obviously, subject to what the happens with the competitions and no competitive situations between different airframes as well. Unfortunately, we can't sort of control all of that.

Rami Myerson: And second question, maybe more for Stephen, around the transition from TotalCare to the SelectCare and other models, it was an interesting comment around Singapore Air moving some of its fleet into new TotalCare long-term service agreement business models. How should we think about that transition, of actually quite a large number of aircraft moving into those models impacting the cash generation from your services business?

Stephen Daintith: Well, relatively immaterial impact. I mean, TotalCare is a vast majority of the fleet. Well over 90% is on TotalCare. And that's the model of choice, and that's what customers prefer, so a small impact.

Celine Fornaro, UBS: I've got 2 questions, if I may. The first one would be on the IAE contribution for 2017 and what we're looking at for 2018 and how you're thinking about that over your 5-year chart. And my second question is looking at some of the focus you had on the customer and how you are delivering for the customer in Aerospace. So if we look at the

A330neo, if you could just comment on the delays that you've had on the engine side there and what are the issues related to; similarly, on the XWB larger engine. And what I'm getting at is, are we sure that the issues that we've encountered on the Trent 1000 and 900 are not going to come up in 2 years' time on the XWB? And how much are you investing in simulation tools if we are going to go for NMA engine?

Stephen Daintith: Okay. So the V2500 question, yes, we are expecting that to continue at around GBP 250 million, GBP 300 million for each of the next 5 years. So you can use that assumption.

Warren East: Talking about the 97K and the Trent 7000, and the probability of issues such as we have seen on the 1000 appearing on newer engines, first of all, yes, the A330neo will be delayed in terms of its entry into service versus the original time plan. And that was actually the case with 97K and the A350-1000 as well. It's not all about engines. The airplanes are complex bit of kit, and there's a lot that goes into it. And the engine is one of those complex bits of kit. We have undoubtedly played our part in the delay for A330neo. However, our delivery schedule for Trent 7000 has been stable now for about the last 6 months or so since well, since around the Paris Air Show last year. And so I'm reasonably confident that we will be there or thereabouts and not be the issue that's holding up that launch when it happens. And so what you should read from that is that everything you've seen on Trent 1000 has nothing whatsoever to do with any sort of programme schedule shifting on the new engines.

Obviously, we can't guarantee that there won't be issues with those new engines. It's a complex system, and there's all sorts of interaction between how the thing is used and how it's been designed. What I would say, however, is that the Trent 900 was designed around 2001, and the Trent 1000 was designed around 2005. And yes, we use different design tools as we move forward, and I'd ask you to consider what's Moore's Law done since 2001 in terms of the compute power that we're able to deploy to design these things. Answer: quite a lot. And that doesn't give me total confidence because you cannot be totally confident in these things, but it gives me a very reassuring feeling. And in terms of pointers in that direction, then it's very encouraging to see the XWB initial performance and compare that with the early years of Trent 1000. And the new design flows and the new design tools that are being used are definitely seen to be having an impact.

Andrew Gollan, Berenberg: Two questions, please. Firstly, on cash flows, traditionally, Rolls-Royce has had very lumpy cash flows throughout the year. So 2 questions around that. Is that profile verticals improving and smoothing? And was there anything within the last month or so, or around the year-end that we should know about that have come out in the numbers today? And the second question is on ITP. I think that the first installment was through shares. What do you anticipate the structure of the next payments in the coming year or so, shares or cash?

Stephen Daintith: So yes, lumpy cash - we do have really lumpy cash flows, and it's sort of struck me that it's coming in...it's quite difficult to decipher sort of operational cash flows from: there's concession payments; there's risk and revenue sharing partner payments; there's participation fees; there's R&D contributions. And we have big, large, lumpy cash flows. In its own way, I often reflect that giving sort of guidance on hundreds of millions of pounds on a GBP 15 billion revenue business in itself is a little bit sort of difficult. Having said all of that, it is an area that we're paying a lot of attention to, to get improved visibility of it and management and planning of it as well. In an ideal world I'd like to systemize it, so we take out that sort of rollercoaster ride that we have, and that's what we're trying to achieve. We're not going to get there overnight. There's a lot to do in this space. But that whole sort of cash flow, working capital management, as I think there's a very good opportunity within Rolls to get a much even profile of flows. So we're not there yet. We're focusing on it, but there's still a lot to do. And Warren, ITP?

Warren East: Well, yes the first payment was in shares. We have an agreement where we decide on a quarter-by-quarter basis. And we'll make those decisions subject to very short-term

cash requirements. And if I look at a sort of worst case, then a worst case would be in the 3% to 4% dilution range even if we had to pay for the whole thing in shares. And so that's kind of boundary condition, but we would -- this is over several years. And you can see that we absolutely expect to see our cash flows improve over that period, and therefore, I wouldn't expect the shares to continue right throughout the period.

Stephen Daintith: I didn't mean to skip your questions here about around the year-end. If anything, I think it's concession payments that we pay after the engine-in- service to the operator, and yet we bill the airframe on a gross basis. But that's something we get every year, and the impact, therefore, is the growth year-on-year that we see as a driver of our working capital growth.

Jeremy Bragg, Redburn: Two questions, one on middle of the market again. Do you think you could hold R&D flat in 2022, i.e. in 5 years' time, if you have to accelerate UltraFan for middle of the market? So conceptual question, i.e. what's it going to cost? And question 2, can you comment on the sort of revenues per engine or per pound of thrust for a new engine versus an old one, i.e. do you see materially higher power by the hour revenues for a similar thrust output engine for an XWB versus an old one? And also, do you see a different overhaul pattern on those engines, please? I'm struggling simplistically to take 3,300 engines divide once every 5 years to get to 240 overhaul. So can you help with those things, please?

Warren East: Yes, right. Let me start with NMA and the R&D cost profile. I mean, the answer is that if we're engaged in that programme, it's likely to cost somewhere between GBP 1 billion and GBP 2 billion over a period of probably about 5 years. And what we will endeavor to do is make as much of that cost as possible overlap with the underlying architecture development, which is the UltraFan programme. We need to do that new architecture because we need to be competitive for larger engines in the back end of the next decade. If there's an opportunity to take some of that investment, convert it into an NMA programme and start to monetize that investment a few years sooner than we would otherwise be monetizing it, then it sounds like a pretty sensible thing to do. But it isn't going to come completely free of charge. We understand that.

And so in terms of absolute, would we be spending absolutely the same amount of money in 2022 as with or without NMA? No, it is bound to cost us a little more. But in the scheme of how much we spend on R&D in total, how much we intend to spend on R&D in total, it's going to be a small perturbation rather than a massive change. With regards to 'are we getting much more out of newer engines', the answer is it depends. The pricing matrix is complex, and we try to secure on a basic principle, more value to the customer means more money to Rolls-Royce. So if it's a bigger thrust engine and I can lift more people into the air, then I pay more. And that is consistent, and that works, and people understand it. If I can do that and, at the same time, spend less on the fuel that is required to do it, then part of that value is actually just competed away. These newer engines are cleaner, they're more efficient, but they need to be in order to maintain our competitive position. If we can extract some of that extra benefit that we're giving to the customer, then we do. But I wouldn't sort of bank on us achieving 100% success there. I don't know of any technology sector in the world that the businesses actually achieve that because we'll compete the benefits away.

Nick Cunningham, Agency Partners: A quick question about IFRS 15, and I apologize for asking about profit, which is obviously somewhat *déclassé* nowadays. But there's some, and as well it is the starting point for cash flow. The IFRS 15, I think you've indicated in the past that there'll be about GBP 100 million annual convergence per year towards, if you like, old GAAP forecasts, which is a quite helpful sanity check for us when we're doing -- or adopting the IFRS 15 forecast.

Obviously, that didn't happen this year. But we can clearly see maybe some of the reasons for that. Is that still a reasonable rule of thumb? That's my first question. And then on R&D, the movement that you indicated, I was wondering if you could expand that a little bit and just, if you

like, the important lines of the R&D, what leads to the net R&D? And is it all falling into Civil, is all the delta in Civil, or is there anything else going on there?

Stephen Daintith: Right, okay. So IFRS 15, yes, slightly larger impact of just over GBP 100 million or so; and it's actually a good news story that actually explains that sort of GBP 100 million, so more than we expected because we sold more Trent 700s linked-profit accounted for in 2017 than we'd anticipated, which is, of course, good news. But there's a GBP 200 million delta because of that, and that's an impact there. Also, a GBP 200 million impact because the Trent 700 sales are larger, so that was the key delta on it, but your original view is the correct one.

And then R&D, yes, just going through the slides, and I'll just get my slide back in front of me again. We started for around GBP 1.4 billion, and then we have contributions from third parties of around GBP 400 million. And the U.K. is the significant contributor, but it's across Germany, the U.S. and other European countries and so on. And that gets us down to our GBP 1 billion. And then we've got the capitalisation, amortization of the number that we highlighted there in the pack, but then a capitalisation of that spend of around GBP 400 million or so. And the policy application that we've put in is in respect of starting at the preliminary design review rather than engine certification. So once we prove the economics of the engine, we start capitalizing it. And then rather than engine in service for stopping capitalizing, we often carry out some performance enhancements to the engine in the first 1 or 2 years of its life to get it up to full spec. And that might be fuel burn or whatever. So it's 1 or 2 years later after engines in service, it's a slightly longer capitalisation period that gets you to the extra GBP 83 million that we've highlighted this morning. And that gets you to the net R&D.

And when you look at the buckets, I think of the net, let's say, GBP 900 million that you're left with then, often, we talk about Civil Aerospace, GBP 200 million of that is in Power Systems; and then about GBP 100 million of that is in digital and electrification, around the electrification initiatives that we're working on, and that's combined, by the way, that's not each. And also enhancing our service offerings in the aftermarket, so that's in there. And then in Civil, you've got around sort of, let's say, GBP 300 million across those 3 engines that were just brought into service over the last 12 months. And then the balance is a whole variety of aerospace technologies, whether it be around turbines, combustion, fuel efficiency, emissions and so on, is the bulk of the spend. That's a broad mix of the R&D when you get down to that GBP 900 million.

Warren East: I'm afraid I'm not living up to the rigour discipline and execution mentality here because we're overrunning on time. So if we just have to make this the last question, I'm afraid. Can we go in the middle there for the last question? I'm very sorry.

David Perry, JP Morgan: Maybe one for Stephen and one for Warren. Stephen, on this capitalized R&D issue, you talk a lot about the GBP 83 million accounting policy, but the much bigger jump seems to be a more discretionary decision to just capitalize way, way more R&D than has been done, I think, ever and there is going to be even more going forward. So can you just explain why you've decided to do that because I think it's sort of GBP 400 million that you're talking about is all going to Civil Aero? And then for you, Warren, I don't know whether you were misquoted by a journalist the other day, but in The Times, they were talking about this huge push into electrification, but it hasn't really been discussed much in this meeting. I mean, just sort of can you talk a little bit to the cost of that and the payback on it, please?

Stephen Daintith: Okay. So on the capitalisation, I don't think it's sort of a 'more than ever'. I think it's more around the fact that we are in the middle -- the --3 large engines that we've brought to the market in the last 12 month period with their first flight, the capital spend on that is significant. And the capitalisation of that is ongoing until they reach full spec, which will be a little while after Entry Into Service. The GBP 83 million is very much around the policy application. It's very much around aligning with our European peers. MTU and Safran are the 2 examples that I quoted, and it is consistent with that. And we think it best reflects the economics

of the capitalisation phase when it's appropriate to do so. So that's where we are on that particular treatment.

Warren East: And on electrification then, as I said when presenting a moment or two ago, now this is an inexorable trend in industrial technology markets. Actually, whilst it makes quite good stories, in terms of actual financial impact today, it's relatively small. We're probably going to be spending about GBP 50 million on transferring electrical capability into the Aerospace domain during 2018. But most of the activity happens in our Power Systems business, and as I say, that is absolutely deliberate. This is servicing applications, where electrification is prevalent today. And it enables us to develop systems expertise, capability in that area but, at the same time, have a revenue stream to back it. So it's kind of absorbed in our Power Systems business.

David Perry: So can I just be cheeky and ask one more? This is more a request.

Warren East: Yes, it's cheeky, yes.

David Perry: In your presentation, Stephen, you said you were really pleased that in your planning discussion, there was no discussion of profit; it was all about cash. So in the guidance you give us, can you just guide us to cash by division because it seems incongruous that we get guidance on profit, but you yourself plan around cash?

Stephen Daintith: And I'd like to get there and I think in good time, not ready just yet. I think we've added a lot of extra guidance this year, and there'll be more to come, I'm sure. But at this stage, we're giving just group cash guidance. And let's see where we get to in 6 months', 12 months' time.

Warren East: Thank you. Thank you all for coming along and taking an interest. We'll be back in 6 months.