Full Year Results 2018

Thursday, 28th February 2019

Introductions

Jennifer Ramsey

Head of Investor Relations, Rolls-Royce

Good morning ladies and gentlemen, it's 09.00, so we'll start. Thank you for joining us here at the London Stock Exchange and for those of you joining online. My name's Jennifer Ramsey and I lead the Investor Relations team at Rolls-Royce, and it's my pleasure to welcome you to the 2018 Full-Year Results presentation.

Agenda

The agenda for today's presentation will be Warren, our Chief Executive, will start. He will share with you his perspectives of the 2018 year and the challenges that we've encountered. Stephen Daintith, our Chief Financial Officer, will talk through the financials. And Warren will round up with an outlook for the year ahead.

The presentation should start – should take about 45 minutes and we'll have about 45 minutes for questions. We'll have questions in the room and for those of you who want to ask questions online, please do so through logging your questions on our webcast service and we'll endeavour to ask those in the room. Finally, can I please ask you to turn off your mobile phones? We have no plans for emergencies this morning, so if any emergency alarms do go, please make an orderly exit.

And with that, I will hand you over to Warren.

Highlights

Warren East

Chief Executive Officer, Rolls-Royce

Group Overview

Good. Thank you very much, Jennifer, and thank you everybody for being with us this morning. So I'm going to start with an overview of the Group and then we'll talk a bit about the different businesses. We'll talk about, as Jennifer said, some of the issues and then have a little look at where we're investing at the moment for the future.

Results Summary

Solid progress

So in terms of a summary of results, we've summarised it as solid progress. Actually, we're very pleased with the performance in 2018. It was a year of, actually, quite strong growth in underlying core revenue. And that revenue growth drove – when combined with good discipline and rigour that hopefully we're introducing, or you're seeing us introduce to the way we're managing the business, that revenue growth has helped us translate into good growth on the profitability measures. And that's resulted in a more than doubling of free cash flow when you look at our core business, and core we're defining as the business looking forward. There's a little bit of restructuring which happened during the year that I'll come to in a few moments.

It's a significant step on our journey towards our 2020 goals, about more than £1 billion of free cash flow in 2020, and our mid-term cash ambitions that we started talking about in the middle of the year at the Capital Markets Day in June. Obviously, there is more work still to be done in 2019 and we'll talk about that as well, but in reflection of that more work to be done, you'll see the dividend per share held flat.

2018 Full-Year Results Overview

Civil Aerospace

Summary level look at the Group. Civil Aerospace, good results in terms of flying our growth and good progress on reducing the cash deficit that we realise on every engine sold. We had a good year in terms of new engines launched, and I'll come to some of those shortly. And obviously the year was dominated by – or the news flow in the year was dominated by issues around the Trent 1000, which we'll cover in more detail.

Power Systems

Power Systems had another excellent year. At the half year, Power Systems was the standout performer and Power Systems continued to perform through the year, and, as we say there, strength across key markets. And very pleasing to see good growth in service revenues; I'll come back to a bit of detail on that.

Defence

Defence we'd describe as a solid year. The standout piece there was additional new contracts, particularly in the aerospace parts of our Defence business. And that left us with a very encouraging book-to-bill ratio and a very encouraging boost to our order backlog in Defence.

Restructuring

At the Capital Markets Day in June the subject was a Group-wide restructuring. And, at the end of the year, we would say we are on track with the timeline that we set out in June; on track in terms of net headcount reduction, on track in terms of trajectory to our goal of a saving of £400 million per annum run rate by 2020.

Financial

When you put all that together, the financial performance showed good, strong revenue growth, more than doubling of free cash flow, and it's particularly pleasing to see that happening – although we'll talk about exceptional charges, from a cash flow point of view, it's particularly pleasing to see that happening against the headwinds of resolving the issues that we faced on Trent 1000.

Business Update

Civil Aerospace

Large engine fleet health remains strong overall

Now I'm going to talk around the different businesses. And I'll start with Civil Aerospace, and we've a few slides on Civil Aerospace because Civil Aerospace is half of our business. And the good news is that we saw fleet growth during the year. So now, by the way, with 4,700 large

engines out there in service, that's 25% more engines, large engines, flying around than five years ago. And that fleet growth, together with the fact those engines are newer and more efficient and therefore better for the airlines to use, is one of the driving factors behind the strong growth in engine flying hours.

At the same time, back at Rolls-Royce, we've been working hard on reducing the deficit that we make when we sell a new engine. We still do make a loss, on average, when we sell a large engine, but that loss has come down by 13%, year on year, and that's in spite of introducing, as you'll hear a bit later, new engines. So, obviously, on the new engines, when they're first launched, the losses tend to be significantly larger, so that 13% reflects some very good progress in things like the XWB.

Trent XWB-84

And coming on the XWB, the 84K version of the XWB continues with excellent performance in service; over 99.9% dispatch reliability. We hit the 3 million flying hours' milestone a little while ago. And, actually, in terms of volume shipments, that engine is going very well, and it's also going out the door very reliably.

Trent 7000

Obviously, there was a little bit of news flow in the other direction around Trent 7000, particularly towards the end of the year. The good news is that we did get the Trent 7000 into service before the end of the year, and as everybody in the room I'm sure knows, we didn't get quite as many into service as we had hoped or intended to. But actually the first couple of months of this year have gone very well for that as well, and so now there are growing deliveries on the Trent 7000.

Pearl 15

Halfway through the year we talked, for the first time, about the Pearl family, new family of corporate jet engines. And the Pearl 15 was launched, that's going to power the Bombardier aircraft, and we're looking forward to the Pearl 15 entering into service towards the back end of this year.

Trent 1000 Financial Impact

Expected cash cost profile

Now, as I said, the news flow was dominated by Trent 1000; this is the engine that powers the Dreamliner. And this morning we are talking about adding an extra £100 million to the expected cash costs of dealing with this issue over the total period from 2017 through to 2022. Most of those costs are incurred in 2018, the year just gone; £431 million in 2018. We're expecting £450 million this year. Notice that's a round number at the moment; £431 million is a slightly more precise number because we've done that. So I can't guarantee it'll be exactly £450 million, but it's of that order in 2019. We do expect that to decline significantly in 2020 by approximately £100 million, and it's falling materially after that.

Now, the thing about the Trent 1000 issues, it has, of course, caused a huge level of disruption for some of our customers. And a portion of those Trent 1000 customers have been seriously affected, and clearly we've been putting an awful lot of effort into managing that from an operational point of view and helping those customers by minimising the number of aircraft they have on the ground. So we do, sincerely, regret the disruption caused to

those customers and that's why we're spending all this money on fixing it, because we want those aeroplanes all flying as soon as we possibly can.

P&L treatment

There is a bit of P&L treatment on Trent 1000 and I'm sure Stephen will cover the detail of that later. But because of the nature of the costs incurred we have extended the exceptional P&L charge.

Trent 1000 Update on Technical Fixes

Package C

In terms of what's happening on the ground and resolving the fixes, here's – on the issue, here's an update on the fixes. First, we had a fantastic Christmas present which was the Pack C version of the compressor blade. The new designs were certified and the first aeroplanes with those new certified blades are flying now, which is good because that is signalling an overall increase in the healthiness of the Trent 1000 fleet.

TEN

We had another Christmas present which was, sort of, over the Christmas, New Year period in that the TEN version of the Trent 1000, which has hitherto had a hard life limit on its compressor drum, that hard life limit has turned into an inspection regime. And as we inspect those engines, we've discovered no issues whatsoever to date on the Trent 1000 TEN. But that has saved our customers an awful lot of disruption by resolving and removing that hard life limit.

There's an order here. You will see it from the dates there, there's an order. We've dealt with the Pack C first because most of the 600 Trent 1000 that are in service are Pack C so, clearly, to minimise disruption, we had to deal with that one first.

Package B

Trent 1010 is the new engines going into service as we speak and that's why logically, that's the next one to deal with. And that compressor blade design is effectively the design that is done and we're now going through the process for certification. And the equivalent blade for the Pack B engines is coming along behind that, and the reason it's coming along behind is because there's a relatively small number of Pack B engines out there. The incidents in the Pack B of the fault is much lower than in the Pack C. And so in disruption terms to our customers, this has minimal effect and that's why we are doing it in that order.

Trent 1000 on the ground

The little chart on the bottom of the slide shows the trajectory of improvement of aircraft on ground as we go through this year. So, aircraft on ground on Trent 1000 is going to be a feature for at least the remainder of this year but we do expect to be in single digits by the end of 2019. Just to put that in perspective, the number in the second half of 2018 oscillated between 40 and 45 engines and as we speak in Q1, it's around 35 engines. Today, it happens to be 31 but that is – it varies according to which engines get inspected and what we have to deal with.

Widebody Production and Deliveries

Widebody engines

So, that's the update on Trent 1000. Continuing with civil aerospace, we have a little bit of news that cropped up in the second half of last year was the issues we had with delivering new engines. And we did expect to deliver and we updated guidance, actually, even shortly before the end of the year. We expected to deliver approximately 500 engines. We actually only made 480 – or we made 480 deliveries. We made more than that but we didn't get them all tested and out the door. And so, we did actually manage to minimise disruption to customer deliveries so 96% of the aircraft flew away on time to their customers during 2018.

2018 production challenges

But the reason for the shortfall is shown up on the right-hand side of the slide. There were some very well-known issues in the aerospace supply chain which affected us, affected our competitors and that was a little bit of capacity issues with some key suppliers.

The thing that particularly affected us was mix of engines in the second half of the year. The newer engines played a more significant role in the second half of the year. And when you're introducing new engines into production and coming up that period of industrialisation, then you do run into issues. And indeed we did run into issues, particularly, around the Trent 7000 where we had some initial learning curve, basically, poor yield on the final test.

2018 quarterly NPI production

And just to quantify that a bit, you can see that in the second half of the year, we were shipping significantly more greater proportion of those new engines.

Ramp-up in Trent 7000 production

And to put in perspective, the Trent 7000, in particular, on the bottom right of this slide where in the whole of last year 32 engines, in January this year 11 engines. 11 engines is roughly at rate for the year 2019. In fact, if we do 11 engines every month, that would exceed the number of engines we need to supply this year on Trent 7000, so we are confident that we have those learning curve issues behind us.

Update on Civil Aerospace Programmes

Emirates agreement

So, just a little bit post the end of 2018 but relevant, I think, for this morning, some recent announcements. So a week or so ago, a fortnight actually, it became public Emirates had been doing a fleet review. And in conjunction with Airbus and ourselves, they were looking at effectively de-risking their business and they concluded they needed a different mix of airplanes. So they made two decisions to cancel outstanding sum of the outstanding A380s and order some more, smaller aeroplanes. And the good news is that the more, smaller aeroplanes that they ordered are a mix of A330neos and A350s; of course, they are our Rolls-Royce powered aircraft. So, broadly, this is good news for us.

Now, as far as the A380 is concerned, obviously, the A380 and the cancelling of the A380 programme is a matter for Airbus and not a matter for Rolls-Royce, so you have to talk to Airbus about that. But what we do know is that we have a good number of airline customers who operate the 380 and whose passengers enjoy flying on the A380. And we are totally committed to supporting those customers and keeping those Rolls-Royce powered A380s in

service for the next 20, 25 years, as long as it takes. And so that's the message from us on the A380 cancellation.

New midsize airplane

Now, this morning, we have also announced that we have made a decision to withdraw from Boeing's proposed NMA platform. Many of you have heard me talk before about the NMA being potentially an attractive proposition from a strategic point of view. And it was all a matter of overlapping our UltraFan development programme with the NMA requirements and seeing if we could achieve a sufficient overlap there to make a sensible answer from a commercial and a risk point of view.

We have concluded that there is not sufficient overlap to create and engine out of the UtraFan architecture within the Boeing timescales at a sufficient level of maturity to tick those boxes in terms of risk and commercial common sense. And so we have made a decision to withdraw from that programme and we have notified Boeing; we actually notified Boeing shortly before the end of 2018. And it's all a matter of our conclusion that we could not achieve a sufficient level of maturity in the time available. And if you don't achieve a sufficient level of maturity, you lay yourselves open to all sorts of in-service issues, potential customer disruption and that's not a good place to go from a risk and a commercial point of view.

We remain, of course, completely committed to the UltraFan architecture and creating that architecture and all the technologies behind it. And I've got a bit more on that to say later.

Trent XWB

Just having a quick look at the time there, we'll step on it a bit here. XWB-84K, very pleased with that. This has been an excellent engine; great reliability and service, customers love it. We have made significant steps in closing the cash deficit on every engine that we ship there, and we still expect to be a cash breakeven in 2020 on XWB-84K.

The 97K version entered into service in February last year and so far our customers are telling us that that is also doing very well. Later this year we expect the first shop visits for the 84K version.

Power Systems

Order intake

Now, moving on from civil aerospace, I had a great weekend last weekend. I went down to Cardiff – and I'll spare you the Welsh regalia this morning. But the other reason it was a good weekend was because I left Paddington station here on one of these Great Western Rail operated Hitachi trains, which is, of course, Rolls-Royce-powered with our Series 1600 engines in a diesel-electric configuration. And we have had a lot of success with new rail programmes that are being introduced at the moment with this product.

That puts us in a great position as all these train operators need to get their trains cleaner in those regions of the world where there is not wired systems for electrifying the rails to introduce our hybrid platform. And we've had considerable success with our hybrid platform in 2018. So far only in terms of MOUs and evaluations, but I'm confident that we'll see some of those turn into orders shortly.

It was a good year then and that sort of thing's been driving things like order intake.

Service growth

The reason I put the train up there as well is because we've been introducing long-term service agreements, taking the civil aerospace model into power systems and been successful in signing up several of these long-term service agreements.

Operating profit

All of that has driven volume and that volume has driven an increase in operating profit.

JV in China

China represents a great growth opportunity for our power systems. Our presence in China is relatively small today but through our joint venture, we're hoping to grow that significantly. As a measure of how fast things can move in China, we introduced – we actually rolled off the production line our first engine in April last year and we've now delivered over 100 from that joint venture.

Product launches

Around the rest of the Power Systems business we also saw a number of product launches which we hope will translate into business in due course.

Defence

So moving to our Defence business, structure there in the bottom left-hand corner. We pulled the various strands of our Defence activity together into one business and so the picture this morning is a frigate powered by the MT30 marinised gas turbine rather than a picture of an aeroplane. I thought you might like a different picture this morning, from Defence. But actually largely driven by the aerospace portions. We've seen a significant increase in the backlog in Defence and that's probably the highlight for 2108.

Halfway through the year at Farnborough, we were also pleased to be selected as one of the four key partners on the UK MoD's Tempest programme.

ITP Aero

ITP Aero very much part of Rolls-Royce but runs separately; we saw solid growth in ITP Aero. Obviously, that is significantly driven by not just Rolls-Royce activity in the Civil Aerospace sector but by some of our competitors who have programmes active with ITP.

Restructuring

Structure to Enable Change

Moving on from the business overview, restructuring halfway through the year in June. We talked about our restructuring programme. This is a recap of what was said. We're simplifying to three businesses, we're getting rid of lots of duplication and enabling our businesses to operate with a little bit more freedom, yet within a framework, so that we can get the centre out of the way and operate in a more modern, faster way.

So how have we been getting on? That was in June. What we've done so far is established a Group Business Services section and this is pulling basically the internal services together, removing lots of duplication, removing lots of multiple interfaces between people within the business, creating friction, slowing things down. Got rid of all that. And that's been active since the beginning of 2019.

Similarly, an innovation hub where we pulled skillsets together that are relevant right across the Group, so that's things like our technology group, digital group, strategy group. If you think about it, it makes a lot of sense to have your future technology and your strategy tied together.

We also announced in June that there would be an associated headcount reduction with all this, 4,600 people. As of the end of the year, it's about 1,300. And that, by the way, is concentrated on the indirect headcount rather than the manufacturing headcount, because actually in some parts of the business we're needing grow capacity. But we believe we are on target too at about 30% of the way through on run rate cost savings.

Portfolio Management

We announced the sale of a couple of parts of our business during 2018 and they are proceeding. We expect the sale of Commercial Marine to complete sometime in the first half of this year. It's probably in the second quarter of this year that this will complete rather than in March, but it's on track for completion with the necessary regulatory disposals having taken place.

Investment & Innovation

A little look to the future. Where are we investing? We're investing in three buckets basically. Our current technologies to make our current products portfolio healthy and future-proof. We're investing in enabling technologies to make that all more cost effective, and then we're investing in some future technologies to get out beyond the current products and services. So these are the current three buckets.

Current Technologies

Right now, we're investing quite a lot in the current technologies, both from a underlying material science point of view and a new design point of view, but also enabling tools to make our engineers more effective.

Innovation for the Future

UltraFan

Looking a little bit further forward, UltraFan. The UltraFan, we had a great year in terms of hitting the milestones on our UltraFan architecture development. Just a reminder, this is basically a high-power gear box driving a very low-speed fan to create efficiency. It's going to be a significant step forward in terms of efficiency, in terms of noise reduction and in terms of emissions. And during the year we have run the core up to full power, we've been demonstrating to ourselves and experimenting with the new composite materials around the fan and the fan case, and also with the new lean burn combustion system. So actually very pleased with how the UltraFan programme's going.

Electrification

Looking a bit further forward, we said we're championing electrification. That's manifesting itself in a few electrification programmes in aerospace. It's manifesting itself in things like entry to the micro-grid business. And the two pictures in the bottom right there, robotics in engine maintenance. We think this is an area where we can take a lot of cost out of engine maintenance and actually improve some of the reliability of that activity as well. And the

picture on the bottom left there is demonstrating some of our investments in advanced materials.

So with that I will hand over to Stephen and I'll be back for a summary shortly.

Financial Review

Stephen Daintith

Chief Financial Officer, Rolls-Royce

Thanks Warren. Morning everybody. I'll do my best to stick to the timetable and I've got I think about 15 minutes to go through the financials so I'll do my best.

Full Year Results

So the full year results for Rolls-Royce. And I'll just pause on this slide for a second. Warren showed this but just to reinforce I think the revenue growth and remind ourselves that Rolls-Royce is a growth business and a strong revenue growth business as well. And that's a core part of our progression and ambition over the medium term.

Core and Non-Core Business Reporting Format

A reminder of our reporting format. We will be talking mostly in this presentation around our core business. And our core business, Civil, Power Systems, Defence, ITP, that's where it stops. Below the line, Commercial Marine, L'Orange, they're non-core business, either been sold or going through a sales process, to get you down to the Group result. So it's core business is what we're highlighting here.

The core for 2019 will become the Group for 2019. Just to reinforce that point.

Group Underlying Results

So the Group underlying results, just putting it in perspective by each division. Particularly strong revenue growth in Civil and Power Systems, 12% and 15% respectively. Defence solid, getting us to core business revenue growth of 10%. Really good progress. Earnings per share growing nicely from £0.023 to £0.16 but still a long way to go on earnings per share.

Core Business Underlying Results

I'm looking at the income statement in entirety. Revenue growth, 10% revenue growth. Gross profit growing at 4%. Gross margin is now at just 10 basis points up to 15.7%, impacted here by the contract catch-ups in the Civil aerospace business that we'll see shortly. If you take that number out you get closer to a 17% margin. And if we put the gross margin in the context of our mid-term ambition of £1 of cash flow per share by the mid-term, we're looking at a gross margin of around 20% for Rolls-Royce. That's the sort of number that's consistent with that £1 of cash flow per share.

I'm going to go through each of the line items over the next couple of slides. Underlying operating margin of 4.4%, again a lot of room for improvement there. Again, mid-term ambition, putting it in that perspective around a 10% operating margin over the mid-term.

Cash flow per share growing nicely, £0.345. £1 in the midterm. And cash return on invested capital – and I'll talk about that in a little while as well – 12% for the year, down 13% on the 13% last year but I'll share that detail with you.

Continued Underlying Growth in Core OE & LTSA

Looking at the breakdown of the revenue growth. So Rolls-Royce is not just a revenue growth story but it's across all revenue streams as well. It's not just one that we're dependent on, it's across all revenue streams. OE revenue growing 10% driven by the growth in activities, and particularly in Power Systems. LTSA service revenue growing at a nice 11%. The strong flying outgrowth is a key driver there. And then other service revenue as well, a nice high margin business for us and that's in respect largely of parts sold for some of the older engines, such as the RB211, the Trent 500 and 800 as well. Getting us to that Group gross margin of 15.7%. And if we adjust for the contract cash-up accounting adjustments, we're closer to 17%.

Core Business R&D

Core business R&D. So as a Group, our gross R&D cash spend was up to £1.378 billion for the year. Net cash spend was up 8%; you can see that at £1.1 billion. Once we deduct the capitalised amount of £498 million and then add back the amortisation impairment, we get to a net R&D P&L charge of £650 million. So our capitalised R&D was £100 million or so higher than we had anticipated, largely driven by, first of all, the increase in cash spend but also the timing and phasing of certain engine programmes, particularly around the Pearl 15, and that drove that increase in net capitalisation. We're guiding today that we're expecting that capitalised amount to come down by around £100 million in 2019.

Just as a reminder, at the bottom left-hand corner, 2018 is expected to be the peak year for R&D cash spent.

Core Business C&A

Commercial and admin costs declining organically by 2%. This is a line item where we expect to see good progress over the next few years, particularly as the benefits of our restructuring programme start to kick in. Our midterm ambition is to get to 5% of sales. We've made progress on that during 2018, at 6.9% of savings, but still clearly some way to go. The headcount reductions Warren mentioned, the 2,000-2,500 or so during 2019, will be a key driver of that.

Restructuring and Exceptional Costs

Restructuring and exceptional costs. We have a £1.4 billion in total exceptional cost that we're reporting today for 2018, made up of four key buckets. The Trent 1000, £790 million, an increase from the £554 million at the half year, largely driven by the numbers of aircraft on the ground being at elevated levels for longer than we thought at the half year. And I'll go through the accounting on that, I'm sure, during the Q&A but I won't dwell on it now because I'm sure one or two questions will come up on it there.

The restructuring in the bottom left-hand corner is largely around the Group restructuring programme that we announced in June of this year. Total cost for that programme around £500 million. Run rate savings of £400 million. The cash cost for the Group restructuring during 2018 was just £70 million, to put that in context.

Trent 900, the closure of the A380 programme, £168 million exceptional cost for us, largely around contracts, the impairment of some intangibles and various tooling write-offs. And then finally a pension adjustment in respect of gender equalisation provisions.

Summary Fund Floats

Summary funds floats statement. What we've tried to do here is summarise the key movements between underlying profit before tax and then Group free cash flow. I think the two key numbers to highlight, working capital change, a £580 million benefit, and then the growth in the Civil Aerospace net long-term service agreement, balance change. Let me just go through those items one by one.

Cash Flow

Underlying working capital reduction

So the underlying working capital reduction. We benefitted £581 million from this. So what were the key moving parts? First of all, we had materially higher payables at Civil and Power Systems, driven by increased trading, particularly in Q4. At Civil related to the ramp-up, particularly around the Trent 7000, and in Power Systems, with a strong order book that I'm going to talk about in a second, that Warren alluded to as well for Power Systems that sees us into 2019.

We also benefited from around £400 million of supplier payment terms standardisation led by Civil Aerospace. This is effectively looking at our extending, where appropriate, our supplier payment terms so that we can essentially extend those payment terms, for example, from 60 days to 90 days and benefit from that. We did a lot of work on working capital. We continued to do a lot of work on working capital at Rolls-Royce and we do see opportunities around the Group. And I've alluded to this previously, whether it be collection of old receivables, inventory management. Supplier payment terms is one opportunity.

We improved our overdue debt collection, that was another driver for us.

At the same time a couple of negatives. We had £150 million concession unwind in Civil. You recall the benefit we had last year.

We had higher receivables in Civil and Power Systems driven by the increased trading activity.

And finally the most material of these items was increased inventory reflecting the operational challenges in Civil and the volume growth in Power Systems. We had around £400 million growth in inventory over the course of the year.

Putting all of these together got us to the £581 million benefit for 2018.

Civil Aerospace LTSA receipts

Looking at the change in the Civil Aerospace net long-term services agreement balance, the movement here is largely driven by the customer receipts that we received from our airline customers driven by widebody engine flying hour growth, growing at 14%, and also increased business aviation flying hours.

There's cash outflow from the major shop visits, which is up from 240 to 286; and also from the check and repair shop visits growing from 356 to 569. Now this balance, this credit balance, also includes the negative contract accounting catch-up adjustment of around

£300 million. And that adjusts for the difference between revenue and cash flow. So this balance effectively presents deferred revenue for Rolls-Royce; cash collected in advance of shop visits.

Cash receipts higher than revenue and it's a core part of our business model, this particular mechanism. It will continue reflecting flying-hour growth.

Group Balance Sheet

So looking at the Group balance sheet. You'll recall that the Group balance sheet is the number one of our four capital allocation priorities. We've materially improved our free cash flow and we've actually improved our net cash/debt position, moving from a net debt position of £305 million at the end of 2017 to a net cash position at this year end of £611 million.

We complete the disposal of L'Orange and announced the sale of Commercial Marine that Warren talked about. We issued pre-emptively €1.1 billion of bonds at attractive rates. We're prefunded all existing debt maturity to the end of 2019. We did that during the year in anticipation of a Brexit event in 2019.

And we reiterate our ambition to return to the single A rating.

Shareholder Payments

Shareholder payments. We are holding the final payment at £0.071 per share and that gets us to a total payment of £0.117. And I've put this in the context of the capital allocation priorities in the bottom right-hand corner here. Strong balance sheet to improve our credit rating and return to that single A rating. To fund organic investment to drive growth in technology. The dividend: payment to shareholders will increase dividend as free cash flow grows. We aspire over the midterm of 2.5 times free cash flow dividend cover through the cycle. But we look at our shareholder payments in the context of our capital allocation priorities. And finally, disciplined and selective mergers and acquisitions activity.

Business Unit Review

Civil Aerospace

Moving one by one through the business units: Civil Aerospace, revenue growth across the board. OE revenue growing 8%, services 12%, and I mentioned earlier that strong services growth, that spare parts revenue growth, high margin growth out of the legacy engines, the older engines, the more mature engines, 12-21% growth there. The V2500 was a big contributor to this revenue growth.

The gross margin impacted by the contract catch-ups: we put a little line in here. If you want to adjust for both 2018 and 2017 for the contract catch-up adjustments – and this is with respect to the long-term service agreements, and I'm going to talk about this, I expect, during the Q&A and the volatility that's implicit within IFRS 15 – it would have been a 10.4% gross margin at Civil Aerospace.

Engine sales

Engine Sales: just to go into a bit more detail for Civil Aerospace; as using Warren's words, half of our business. Widebody sales went to 469. We did ship 11 further. We're guiding to

520 for 2019. Bottom left-hand corner, a reminder that around 2,300 widebody engines that are on order, and the mix of those, with the Trent XWB being a key driver of that.

Key cash drivers

So you'll recall the three key drivers of growth for us over the mid-term, the number one of these being the reductions in the OE deficits. We made good progress again in 2018 on this goal; a 13% reduction. The average OE loss is now down to £1.4 million. Looking at the top right there, the XWB-84 particularly good progress with 32% improvement in unit loss. As a reminder, our goal is that for 2020, XWB-84 will be breakeven. And indeed across the – by 2022, we expect the margin across the widebody fleet OE to be breakeven.

I won't dwell too much on this slide in the interests of time. Engine Flying Hour growth: large engine, invoiced engine flying hour growth grew by 14%, reflecting the growth in the install base but also the increased use of those engines. The large engine in service fleet, just going back to that earlier comment, 8% growth to 4,757 engines now in service.

Shop visits. Shop visits grew. 46 shop visits extra in 2018 – this is the major shop visits, the ones that take place every five or six years or so. And then check and repair visits, growing significantly, largely driven there by the accelerated maintenance activities you might expect on the Trent 1000.

Trading cash flow

And that – putting all that together gave us a £200 million benefit to the widebody cash margin. The OE deficit improvement gave us a £100 million benefit at the OE level. When you put all that together, together with the benefit from the increased growth in spare engines to support the growing fleet, we finish with a £400 million improvement to the widebody underlying cash margin. And this is a slide that we first introduced in 2017 in an attempt to give a more user-friendly perspective of how cash flow works in Civil Aerospace on a driver basis.

So just moving very quickly through the rows. First of all, we started with original equipment; number of engines invoiced times the loss per engine. Then underlying services, the growth in flying hours, spare engines. You can see the Trent 1000 cost coming in there as well, taking us through to a widebody cash margin of £900 million after the Trent 1000 costs. And then after we go through the other engines and through to R&D and CAPEX and so on, working capital benefit, we end up with trading cash flow of £200 million for Civil Aerospace.

Going forward over the mid-term and into 2019 as well, we are expecting working capital change to become more normalised. I'll talk about that later.

Power Systems

Power Systems: strong revenue and profit growth. 15% organic growth in Power Systems. Really strong growth. Flowing through nicely to a growth in operating profit of 20%. The gross martin is impacted by the product mix we have – there was an increase in lower margin sales in construction and agricultural markets, offsetting any benefit from the increased volumes and the improved factory utilisation.

Overview

Looking forward for Power Systems and just coming to that order book point, there's more than a 20% increase in the order intake year over year, better order cover ratio than the prior year also. So Power Systems is well placed for 2019. But as a reminder, and Warren mentioned this, 2018 did benefit from that pre-buy-in effect in respect of the emissions regulations that are being introduced in 2019 for diesel engines. So one shouldn't expect the sort of revenue growth we saw in 2018 in 2019 for Power Systems. And I'll get to the outlook in a second.

Defence

Defence: a solid year for defence. Revenue pretty much flat year on year. Operating profit down slightly due to gross margin deterioration with lower combat and submarine volumes, but partially offset by the increased demand for the multi-role tanker transport engines that Warren mentioned. Operating margin down slightly. Higher R&D spend. Our defence business is moving into an investment phase over the next three years. We should see the sort of trend that we saw in 2018 be replicated in 2019 as well.

I won't dwell on this. I think I've mentioned it. A strong order book for Defence as well. Good orders received during 2018: 1.3 times book to bill. The closing order backlog there now is £6.8 billion. So good progress on the order book in defence.

ITP Aero

ITP: solid growth in ITP. 6% revenue growth, operating profit growing nicely as well by 3%. And I won't dwell on this. On the outlook for ITP for 2019, 10% revenue and profit growth.

Accounting Policy Updates

Couple of accounting policy updates. With effect from 1st January 2019, IFRS 16 will be bringing operating leases onto the balance sheet. The effect here will be an increase in our assets by £1.8 billion, and an increase in our liabilities by £2.1 billion. The impact on PBT is negligible. No change to cash, of course. Just I'd update you on that accounting change.

And IFRS 15, IFRS 15 requires the disclosure of unrecognised revenue. This is the closest proxy to the value of the order book, but it is quite different to the way we used to disclose the order book. First of all, it includes only firm purchase orders. That represents about nine months' worth of OE orders, and it represents the entirety of any contracted after-market revenue. Whereas the previous order book value had included all OE orders at list price, and then just seven years of aftermarket. So very different basis of calculation but somewhat reassuringly, the numbers aren't dramatically different, although it's complete – one might argue it's a coincidence, but that's where we've got to.

Guidance

Guidance for 2019. So just running through these. 2019 outlook. Civil Aerospace; around 10% revenue growth. Power Systems – going back to my earlier comments – mid-single digit revenue growth. Defence, stable again, reinforcing those earlier comments that I made. ITP around 10% growth. Civil, the loss reported of £162 million will be approaching a breakeven position during 2019. Power Systems margins will be about 100 bps higher; Defence 100

points lower. ITP stable. Put all that together, we get to core profits of £700 million, +/- £100 million; and free cash flow of £641 million again – sorry, £700 million, +/- £100 million. And just those ranges, putting it in the context of a £15 billion revenue business, those ranges seem large in respect of the absolute numbers of profit and cash that we're guiding to, but in context, the size of our business, they're actually quite small. Just putting it in that context.

And a further step towards our free cash flow of at least £1 billion in 2020.

Finally, reinforcing and reiterating our mid-term ambition to move to at least £1 of cash flow per share by the mid-term, currently at £0.345. Cash return on invested capital, at least 15% through the cycle. We're now at 12%. A little higher than we reported at our Capital Markets Day. And just as a reminder though, that cash return on invested capital reported then of 9% was on old GAAP balance sheet basis. This is now IFRS 15 balance sheet basis, and they're markedly different balance sheets. So just to put that in perspective. And that has caused us therefore to be more ambitious around the 15% cash return through the cycle. Just to make that point.

We're using CROIC now increasingly so within the business to help us with our capital allocation decisions as well, which is encouraging that the – it's not just how we report progress but it's how we measure and manage and work within Rolls-Royce as well.

With that, just before I wrap up, I just wanted to say, I know that Group Finance in Derby are watching now, and PwC are watching. I just want to say, thank you very much to the team who it's a first year auditor and the first full year of IFRS 15, an absolutely cracking job over the last two or three weeks. So thank you very much for everybody watching up in Derby and to Pricewaterhouse.

Warren, over to you.

Business Outlook

Warren East

Chief Executive Officer, Rolls-Royce

Thank you, Stephen. Bearing in mind the lousy job that I did of keeping to time in the first half, I won't keep you long on this, and we'll get onto Q&A. So rather than stepping through this you can read this in the book; there's a very logical set of our sort of high level objectives for – for 2019. You'll see not a huge change in terms of what we're doing year on year because they all sit within this sort of wider-term high-level thing. And we put this in as a reminder, that it's about making sure we have a balanced portfolio. A lot of our expenditure goes into vitalising our existing capabilities. That means that products and services that we operate today, how we make sure we continue to operate those and develop new versions of products and services ever more cost effectively.

The tools that we're using to do that, largely reinventing the business through digital, through adopting digital technologies, to link our designs, to our manufacture, to our supply chain and so on. Transforming the way we actually operate the business, both from a manufacturing point of view and, as you heard Stephen say a moment or two ago, by how we measure and

manage our performance. And then looking forward to the future with new technologies, very much embracing the inevitable electrification that's sweeping through the industrial landscape at the moment.

And so with that we'll move straight to your questions. So I'm sorry, I didn't spot whose hand went first. Those who are driving the microphones, please, we've got a couple here and then in the middle. Why don't you fire away? Christian, do you want to go first?

Q&A

Christian Laughlin (Bernstein): Hi, good morning. Christian Laughlin from Bernstein. Two questions from me. The first on the Trent 1000 and the second on the NMA. On the Trent 1000, are you at or do you see on the horizon the point at which you would be comfortable or confident in that you'll have fully provisioned for the cash outlays required in the future to get this programme back on the right footing?

And then secondly around NMA, could you elaborate a little bit on your concerns about not reaching sufficient maturity on Boeing's timeline? I mean, it seems a bit from the outside – and granted, obviously, we're observing from the outside with a lot less information. But that UltraFan has been actually progressing quite nicely, against a number of development milestones. So if you can just clarify or elaborate a little bit on what's changed your mind or driven the decision, that would be great.

Warren East: Okay. So I'll do the NMA one and you talk about the Trent 1000? So it's hard to put much more colour on it really. The reality is that Boeing have a specific engine programme that they're working towards. The exact specifications of that engine are not completely tied down yet, in terms of requirements. But based on the extensive work that we've done with Boeing, in tracking those specifications and looking for how that overlaps with our UltraFan programme, we simply couldn't find sufficient overlap and there would have to be additional work that needed to be done, specifically for the engine variant, that would be required for NMA.

But now of course, technically, we could make that work. That wouldn't be a problem. But we do know from bitter experience that you need to do a huge amount of very rigorous testing work to ensure a certain level of maturity when the engine enters into service. And we simply couldn't find enough hours in the day – even if you threw many more bodies at it and much more money at it, there's simply not enough hours in the day to do all that work in time to get to a sufficient level of maturity in time for Boeing's timescales.

And so it comes down to what makes commercial sense and how much risk do you want to put into that programme. And we chose to be completely open with Boeing and our customers and our investors, that rather than get into a programme and get towards the delivery date and say, oh, sorry, we can't do this, we need to do an extra year's worth more testing, once we'd ascertained that we just couldn't make it fit in the timescale to get to that level of maturity, we had to withdraw.

And that means that we can concentrate on our UltraFan architecture development, which as you rightly observe is going pretty well at the moment. Very pleased with the progress in

2018 on that, but that is targeting an architecture development and the milestones that we have to hit in that. And it just takes you to a different place than what was required for NMA.

Stephen Daintith: So the Trent 1000, the Trent 1000 will – is first of all, just as a reminder, is a multi-year cash cost over six years, from 2017 to 2022. In total around £1.5 billion of cash cost, being broadly £100 million in 2017, £450 million in 2018 and 2019; £350 million in 2020; and then the balance of £150 million or so over 2021 and 2022. That's the profile.

That is £100 million more than we expected at the half year but we do believe now that with the regulatory approvals that Warren mentioned in his presentation that we've received over the last couple of months and the one or two that are still expected, and with the improvement in the aircraft on-ground situation falling into single figures towards the final quarter of the year, those will be the key sort of drivers of us getting certain around the cash and the cost profile on the Trent 1000.

Around 80% of the cash costs are being incurred over 2018, 2019 and 2020. And just as a reminder as well there's just over half of the total cash costs are broadly in respect of the customer disruption costs and claims that we're – in respect of our customers caused by the aircraft on ground.

So the aircraft on ground, we have made improvement over the last couple of months, reducing from the average of 41 during the second half of last year to 35 now. We expect to see that continue to decline during 2019. And it's that that gives us the confidence, along with the approvals from the authorities – regulatory authorities, to feel confident that with the £1.5 billion cash cost is a solid estimate.

Warren East: Thank you. Pass it along and then we'll go to the middle.

Rob Stallard (Vertical Research): Thanks very much. Rob Stallard from Vertical Research. Couple of quick questions on the 2019 guidance, probably for Stephen. First of all, you said working capital normalisation. Does that mean roughly breakeven for 2019? Secondly, what are your expectations for Group CAPEX this year? And then finally, looking at the Civil division, how do you expect the aftermarket to progress both for long-term service and for older engines in 2019? Thank you.

Stephen Daintith: Okay. So 2019 guidance. So working capital, normalised levels. I think the only material item of working capital that we're expecting at this stage is reduction in inventory. And one might expect that given the growth in inventory that we saw during 2018 which was largely driven by the Trent 7000 production ramp-up but also the growth in Power Systems. So that's the only single material item of working capital that we're expecting.

Aside from that we're not anticipating or planning for any significant items in either the payables or the receivables line. Having said that – and I've mentioned this before – Rolls-Royce and our industry is an industry of lumpy cash flows and they can – timing impact can have an impact. But at this stage there's nothing in our guidance that assumes anything other than the inventory improvement.

Second question, sorry, was…?

Rob Stallard: CAPEX.

Stephen Daintith: Yeah. CAPEX. I don't know whether we've given explicit guidance but CAPEX, if anything, we should be declining slightly from current levels and then let's say anywhere between £50-100 million and then steadying down at that level over the next five years. That's the plan for CAPEX. And it has grown over the last few years, just as a reminder of that, to accommodate the production ramp-up that we've seen over the last couple of years and continue to see.

Rob Stallard: [Inaudible] the aftermarket…

Stephen Daintith: The aftermarket progression?

Rob Stallard: Yes, old engines… Sorry, old engines versus long-term service.

Stephen Daintith: I mean we had a very good year on the old engines. We can't expect that sort of growth to continue. We still think we're going to see good growth, particularly on the V2500, for the next three years or so. But I don't think we can expect to see that sort of revenue growth continue, so we ought to be a bit more circumspect in our little longer-term horizon, and moving into single-digit territory for revenue growth there.

Nick Cunningham (Agency Partners): Thanks, Nick Cunningham from Agency Partners. I wanted to ask about the thinking behind holding the dividend. Because it sends an opposite signal to the commentary and the guidance, the medium-term guidance. And it's not actually very much money, at least a percentage increase and it's not very much money. So I wanted to understand that.

And then second, different question on the NMA decision. What's the route to market for UltraFan in that case? I mean, the obvious one would be an A350Neo or stretch. Will you be ready for that? And does it also mean that, effectively, the pairing has now become Rolls-Royce and Airbus, GE and Boeing and Rolls won't do another Boeing programme? Thank you.

Warren East: Shall I do that one?

Stephen Daintith: Yes, and I'll do the dividend?

Warren East: It's certainly not our intention that the Airbus-Rolls-GE-Boeing thing is accentuated. And to that end, it would have been very good to have been able to participate in the NMA programme. But we've gone into why we couldn't participate in that. so I won't repeat that bit now.

As far as UltraFan is concerned, then it's a scalable architecture. And it's scoped to scale from about 25,000 pounds of thrust through to about 100-teens thousand pounds of thrust. And, that means we can go after widebody, we can go after single aisle. We expect the first opportunities will be in widebody, things like you suggested just then in the question. .

Obviously, introduction of new airframes is a matter for both Boeing and Airbus. But I can assure you that our relationship with Boeing is very rich and very healthy and over the last 12 to 18 months, while we've been working together very closely on the Trent 1000 programme, it's been a great opportunity for some of the Boeing engineers to wander around in Derby and to get a much better idea of how the UltraFan programme is developing. So I'm actually quite optimistic with both airframers for the future and UltraFan.

Stephen Daintith: And on the dividend. Yes, the dividend will be under review in 2019. We are clearly approaching that territory, where it is appropriate, to reconsider our dividends and restore it to previous levels.

Just to put it in the context of a couple of things. Number one, we also are extremely keen to return to a single A rating and improve our balance sheet. So that's a key priority for us. And number two, we have the ongoing issue of the Trent 1000 and the £450 million or so of cash costs there as well. So we're just balancing it against those other priorities and managing through there. It will be under review in 2019, but we're certainly approaching that territory where it is appropriate to start restoring the dividend again.

And just on CAPEX, we do a disclosure, we are explicit about that guidance and it's a £75 million reduction in 2019. So between that £50-100 million I mentioned.

Warren East: Okay. The microphone is just moving that way and then it's going to go back a row.

Andrew Humphrey (Morgan Stanley): It's Andrew Humphrey, Morgan Stanley. Just a couple of quick ones, one on IFRS 16 and one on Power Systems. Stephen, you mentioned IFRS16 as being neutral at PBT level. Can you tell us what the impact will be on EBIT?

And the second question on Power Systems. I think over the course of 2018 you've highlighted a level of pre-buying there ahead of some regulatory changes. You're still guiding for growth in 2019. Clearly that there, I mean, if that's the case, there must be a stronger level of underlying growth in that business. And maybe talk about the offsetting factors there, that'd be great. Thank you.

Stephen Daintith: Shall I take quickly the IFRS16? Yes, the operating profit level would be about £30-40 million pound benefit – just an estimate at this stage, but that's what we'll be. Yes.

Warren East: And on the situation in Power Systems, I mean, we highlighted a couple of things that Stephen said, 15% growth last year. The pre-buying was one of the factors behind that and unlikely that that can be sustained. However, we're not looking at a complete reversal because some of the other growth in Power Systems is in things like PowerGen. It's in things like adoption of some of our new variants in gas engines, where we're coming from a very small base.

And as I alluded to in the presentation, a little bit in terms of geography as well, where again, in some parts of the world and in particular in China, we're coming from a very small base. From a cost point of view, we've had a significant barrier historically in China and that's why we set up the joint venture. I think when we set up that joint venture and we talked about it, first of all, we said it's partly about cost to make ourselves more competitive in China, but also to make ourselves more competitive generally, because then we can export some of that to the rest of the world. But, in terms of initial production from there, it's about targeting growth opportunities in China. And, compared with some of our competitors, we do target a much broader field of applications.

And so that's really what's underpinning our growth expectations for this year. Not as racy as last year. There was that particular factor. But we still expect single-digit – mid-single-digit growth.

Zafar Khan (Société Générale): Thank you. Good morning, Zafar Khan from SocGen. Stephen, just on slide 40, the change in Civil Aerospace net LTSA balance, which is quite a big benefit to the cash flow. Slide 40. Obviously, you've got on the positive side the growth and the flying hours, but I suppose as the fleet matures, you're going to get more shop visits. So what should the decay look like in that number going forward?

Stephen Daintith: Yes, I've been asked this before and I think we were expecting this margin to grow nicely over the next five, six years. Growth will continue; it will carry on growing, albeit at a much smaller rate as the six-year anniversary comes up for those first shop visits of those delivered six years previously and when the ramp-up first started in OE production. So we should be thinking around sort of 2024, 2025 is when we start to see the growth plateauing and then growing more steadily, in more moderate levels. But over the next five or six years, we are going to see good growth in this margin.

Zafar Khan: But that particular number in the cash flow statement, should we be looking at that number being stable over the next four, five years?

Stephen Daintith: It will depend. It will depend on the nature and mix of the shop visits, year to year. Essentially, it also depends on flying hour patterns, as well. We've had some very good years of flying hour growth and it will depend on that. But your logic is not wrong. It's that it ought to be a relatively linear type of relationship, but it will depend very much on the mix and type of shop visits.

Warren East: Let's move that way and then we'll come over to you.

Charles Armitage (Citi): If I could just sort of – Charles Armitage with Citi – just continue that a little bit more. The £944 million, is that about where you would have expected it? Was it particularly good or was it particularly bad? Are we're looking at £700 million to £1 billion or are we looking at £700 million to £900…?

Stephen Daintith: We should also, on this point, remind ourselves that this includes the credit to the balance sheet from the expense, the debit of the contract catch-up in Civil. So, approaching £300 million of this is non-cash. So the number is closer to £600 million rather than the £944 million. And we do point that out on the slide once you adjust for that. But not withstanding that point, yes, that's how we should be thinking around this sort of – the cash receipts from the aftermarket activity.

Charles Armitage: £600-ish million for next few years, and then…

Stephen Daintith: Again, very much depending on how flying hours, aircraft, the particular engine growth, but also on the type and mix of shop visits. So we are going to see a ramp-up in shop visits, to mirror the growth in the install base over the last few years, as well.

Warren East: If you could pass over the microphone to that end of the row and Celine. And then we'll come up to the back on that side.

Celine Fornaro (UBS): Hi. Good morning. Celine Fornaro from UBS. My first question would be regarding the growth in the old engines and the flying hours, and some of these engines you're probably paying those yourself as a compensation to some of the airlines that have got 787 issues. So I just want to understand if that's capturing that revenue number and how would you account for that?

And my second question is regarding the single-A credit rating, which is clearly one of your top priorities for the year. So how do you think the rating agencies will react to the results today in the guidance? Thank you.

Stephen Daintith: So I'll do the second question first. So –

Warren East: I'll do the first.

Stephen Daintith: And you could first one, yeah. So the single-A rating, I think in my conversations with the rating agencies, underlying free cash flow is their core metric and growth in the free cash flow. I think that they'll be pleased to see net cash on the balance sheet. But they also look very hard at the quality of the cash flows as well and there are those that will look – and clearly we benefit from working capital in our current year cash flow.

And whilst we have a benefit from those normalising standardisation of supply of payments terms, you'd only do that in the year and it's a permanent benefit in the year but it's not repeatable year after year. So the rating agencies will look at that. So I'm expecting they'll be pleased with the progress. They are extremely keen that we deliver our, at least, £1 billion of free cash flow by 2020 and they'd be looking at the quality of that cash flow as well.

So as it stands, I think they'll be encouraged but I'm not expecting any material change at this stage from the rating agencies. Warren?

Warren East: And I think to the point, if I've got it right, it was about older engines and the service revenue that's flowing from those older engines and the possible contribution of that caused by us leasing older aircrafts to help our customers with the disruption. It's true that that's one of the tools that we've used to help our customers through this time and that's one of the things that we're paying for in these extra costs.

But actually compared with – I'd draw your attention to one of the slides in Stephen's presentation where we're talking about key cash drivers in Civil Aerospace and the service piece. I'm afraid I haven't got the number of the slide here because I'm on another version than yours. But there is just a lot of activity amongst the older engines. And if you think about the quantities of aircraft that we've had on the ground, there just simply haven't been that many Trent 1000-based aircraft on the ground.

The volumes of other aircraft we've had to lease to help customers out is very small compared with the numbers that are contributing to this older engine service revenue. So it probably is a very small factor in that but we're talking typically – and not on all the airlines affected but for some of the airlines affected, it would be small single-digit number of aircraft that we've been leasing for periods of months. Thank you.

I think we've got a few over here and it's important to go to Jennifer because she has some of the online ones. So should we just do some of the online ones first and then we'll come back to the group on that side.

Jennifer Ramsey: So it's my chance. I'll ask in typical sell-side fashion. So I have three parts. So the first part, the first question was, is it ethical to pay – to delay paying suppliers, and is it effectively borrowing money at the expenses of suppliers? Stephen, if you wanted to answer that question. Secondly, are we prepared for a no-deal Brexit? We have not had any Brexit questions, so I thought I'd raise that because there were a number of Brexit questions.

And finally, can we comment on where we are in terms of winning orders for the Trent 1000 and are we seeing our market share being lost there, given the number of campaigns that we've run in 2018 and how do we view the future?

Warren East: Okay, you do the supplier. I'll do the other two.

Stephen Daintith: Yeah, so is it ethical to delay paying suppliers? Well, first of all, we're not delaying paying suppliers. We've renegotiated payment terms with suppliers, which is an important distinction. And let me just put this in perspective as well. On average, for our large suppliers, we pay on 75 days, on average. The industry average is anywhere between 90 to 120 days. So if anything, we're well below what the industry practice. And we're also signatories to the prompt payment code. And when we look at that and compare ourselves again with others in the industry, we're a top quartile performer in terms of paying on time.

So I can see the point that's being raised in the question there but it's not applicable to Rolls-Royce.

Warren East: And Brexit, Brexit has wasted a huge amount – a lot of people's time over the last several months and it's not going to waste anymore of our time. We are ready for whatever outcome happens with Brexit. Clearly, we've had to plan for the contingency of a no-deal Brexit for a long time because obviously we have to operate our business on 30th March, whatever happens. And to that extent, we have been building necessary buffer inventories. We have made the necessary movements of job functions – no actual transfer of jobs but job functions – out of the UK into mainland Europe, based out of our Dahlewitz site for regulatory approvals. And so we're as ready as we can be.

We can't guarantee that every single one of our suppliers is as prepared as they could be. We've spent a lot of time making sure that we've asked our supplies and we have challenged their answers. But at the end of the day, when those engines take an awful lot of parts and it only takes one of those parts not to be there for the engine not to go. And so that is a risk but we have taken all the steps that we can see is necessary.

And I should also point out that in terms of flight disruption around Europe, flight disruption between the UK and EU countries, typically this is a narrow-body activity rather than a widebody activity. And of course, with the exception of the number of the 2500s and that's a relatively small part of our service revenue, then we're not exposed to that Brexit risk.

On the Trent 1000 and the market share, a couple of facts. Our market share has declined in terms of the new orders and it does sit at – our market share today is about 35%. We had obviously hoped, ahead of this issue, that that share would be growing from mid-30s towards 50%. I would interpret what's happened as a delay in that trajectory. The Trent 1000 is actually a very reliable engine. It has a 99.9% dispatch reliability. And our customers who are flying the Trent 1000-powered Dreamliners, whilst not initially – clearly they were very disrupted – are able to partition in their minds the operation of the aircraft when the engine is behaving normally and take that away from when the engine isn't there at all.

And so we do think we have a product. It would be wrong of me to say that the issues we faced haven't affected things. Certainly our competitor has utilised the situation to their advantage with some very aggressive sales campaigns – wouldn't you – and so I actually don't think this is a long-term thing but it's undoubtedly an interruption. It's when we're

obviously sensitised to. And it just so happens that the campaigns that happen in the particularly the first half of last year did not go our way.

But that doesn't mean to say that we're wringing our hands with horror. And we're putting our best foot forward on what we believe is a competitive engine and a good solution for those customers who were engaged in campaigns now and in future.

So now we need to move into a few questions here in the second row.

Harry Breach (MainFirst): Harry Breach from MainFirst. Can I just ask – firstly, the large engine OE losses, I think £1.4 million for the full year, I think you said £1.4 million for the first half as well. Is the fact therefore that we don't seem to have seen second half improvement just a function of new product introductions in second half? Great. Thank you guys. Can you give us any colour on the sort of the pace of improvement in 2019 on that?

And then next question completely different, slightly re-looking at Rob's question on T&M aftermarket. I appreciate what you say about unsustainability of 21% organic but at the same time the dynamics of the V2500 are quite favourable. Can you give us a bit of your sense about current T&M spares and shop visit demand in your fleet here in February 2019. Is it still running at last year's pace?

And then the very final one – and sorry to labour this, Warren, in particular – we talked earlier on about cost estimate stability on Trent 1000. Could we maybe look on the technical side? Can you give us a little bit of feeling what gives us a confidence that we're not going to make further durability discoveries on Trent 1000, where we've kind of got to the bottom of the barrel on discoveries?

Warren East: So the first one was cost trajectories on how it's unfolding with the balance of this year on OE. Is that right?

Stephen Daintith: The OE improvements –

Warren East: The OE improvements that we expect to see this year? Well, Stephen outlined that there are two data points; breakeven on XWB by 2020 and breakeven on the portfolio by 2022-ish. The latter is obviously dependent on the product mix because what's going to happen is XWB will actually go into a state where we make a positive contribution every time we ship an engine. And some of the – for some of the other engines, low-volume – I'm sure the Trent 900s that we ship over the next couple of years will never make an OE profit on. For the others, then Trent 1000, Trent 7000, there's a lot of commonality between those engines and there's actually a lot of commonality between the 97K version of XWB and the 84 version of XWB.

So we're moving from a situation of multiple engines in relatively small volume to essentially two engines and variant – and one variant each there off, and therefore a higher volume of all of those engines, which is why we expect to see that second trajectory. But the rate at which we get there will depend on the product mix. And as we look through 2019, then we can see we're going into 2019 with XWB accounting for approximately 50% of the shipments and the remainder made up by these new engines, largely the 97K variant on which we make a loss and Trent 1000/7000.

So I think we'll see a continuation of the trajectory that we're on and we absolutely – there's nothing that we can see today to suggest otherwise.

Stephen Daintith: Do you want to do the T&M one?

Warren East: Yeah, T&M one. I don't think we're going to see the 21% growth that we saw into 2018-2019. But it remains a healthy – today you asked the question about – today it's a healthy and growing part of our business. I think if you would have held me to it and if I were to hedge my bets, I'd say you should be thinking around 10% growth in 2019.

Okay, and are going to find some further durabilities on the Trent 1000, durability issues? Look, I cannot sit here and rule out that we won't find some issue on any one of our engines in future. That's just how things are. However, what I can assure you of is that the Trent 1000 situation was, if you look at the whole history of the thing, very unusual in having multiple issues with one engine. And if you think about it, there were number of iterations of that engine to get the thing right.

Where we are now with Trent 1000-TEN, we are confident that we have sold the fundamental turbo machinery issues that have caused all the hiatus in 2018. We know we've got that design right to the extent that we have been thoroughly testing, Boeing have been thoroughly cross-examining and airworthiness authorities have been convinced, not only in terms of certification of the redesigned parts but very thorough analysis of the failure mechanism and what sits behind that. So the best brains in the world on this have spent the last six months on it. So that's as confident as we can be.

As I say, you can't possibly rule out. There might be some other issues in future, but that's the same as any other engine. I think we've got Rami.

Rami Myerson (Investec): Rami Myerson from Investec. On spare engines, you've talked about an increase of £112 million of revenues from sales of engines to your engine-leasing JVs. Can you maybe talk about the profit and cash contributions from those JVs to underlying profit and cash?

The second question would be on long-term deliveries. In the past, I seem to remember a chart where you talked about 550 to 600 deliveries a year. Next year is only 520. Do you still plan on getting to that 600 in the timeframe 2022, 2023?

And lastly on NMA. Would you consider participating as a partner in one of the engine programmes of one of your competitors if they are selected for that programme?

Stephen Daintith: I'll kick up for the early one, and you can do the spare engines.

Warren East: Okay.

Stephen Daintith: Yeah, you should be thinking about half of that number as sort of contribution to profit and cash as a rough guide.

Second question was…

Warren East: Okay, volumes of the – volumes of large engines. Look, when we put up our projections of volumes, it is our best estimate at the time. What I would say is we probably got a tighter grip on demand signals from our airframers than we possibly had a couple of years ago. And that isn't to say that they take some orders and they try and shove a few other things in, so things could change.

I think we're in the zone of 500 to 600. We know we have the capacity and the run rate to deliver at over 600 per annum, if we need to, because we've done that. We've done 160 plus

in a quarter over the last couple of years. Clearly, when we're going through, introducing new engines, that gets interrupted little bit, but as I say, that's largely behind us.

And what you see today is basically the result of our sales and operations planning process for 2019 based on the demand signals from our airframers. And as we look forward, the demand signals that we're getting at the moment are for in that zone of 500 to 600, but it could change.

And on NMA, would we partner with somebody else? Well, we'll have to see what happens and who gets selected. We've made our decision in terms of our proposed offering. If we can do something useful and it makes commercial good sense to partner in future, then of course we're open. But now let's see how the future unfolds.

One behind and then one over there and then back to the middle. Okay. And we're at 10.29 at the moment, so we're going to have to be fairly swift.

Andrew Gollan (Berenberg): Hi. Andrew Gollan from Berenberg. Question is on contract catch-ups. Quite a big negative in the year, almost £300 million. Firstly specifically on that, what's driven that this year or in 2018?

And then perhaps a broader question. The negatives generally are trended to be bigger over the last few years, if we look back at the date you've offered us. Is that indicative of a bigger issue in terms of contract assessments over the long-term because we're making increasingly large negative adjustments? So a bit of a devil's advocate, but help us understand that, please?

Stephen Daintith: Okay. So first of all, the contract catch-ups. First of all, this is an IFRS 15 treatment. It is a very different treatment for contract margin reviews that take place during the year on our 187 contracts that we have with various airlines. And the way IFRS 15 works is that it looks at the cost to go on the contract and any variation that cost to go, either positive or negative, has an adjusting effect on the revenue previously reported as a catch of revenue.

So what this can mean is that – and the volatility of IFRS 15 is demonstrated here that the very small changes in estimates of the cost to go on high-margin business, high-margin engines that are significantly through that programme but still has a large amount to go, relatively small changes can lead to a disproportionately high adjustment to revenue previously recognised.

And in respect to the £276 million, that's most true of the Trent 700, of course; high margin, about half way through its programme – of its revenue collection. And that's largely what this is in respect of. And it's largely just around utilisation of the aircraft by these customers causing us to have a slightly different view on the cost to go. And it's implicit within the volatility of IFRS 15 how that works.

And what we will be doing is building, I would say, more contingency into our estimates around contract margins going forward to protect us from those volatile swings. So a slightly technical answer but it's an important one and it also plays into how we think about outer years as well.

And then the second one, I think this – I don't think it is indicative of any sort of malaise generally. I just think it happens to be first year IFRS 15 and that impact. But you're not

wrong that if we look over sort of 2014, 2015 or so, we have the same benefits and then sort of 2017 and 2018 unwinds. I don't think one should read too much into that. It's a very specific event in 2018 that's led to this Trent 700, in particular, contract catch-up.

Warren East: Okay, thanks. Final two questions. I think we've got one there and then we're going back to. Did we ever to you? And sorry, is if you've already had a go. So we'll do one there and one up there.

Olivier Brochet (Credit Suisse): Yes, so good morning. Olivier Brochet, Credit Suisse. Two questions quickly. The first one on spare engines for 2019 and beyond. Can you help us understand what you have in your plans compared to the 50 that you did in 2018? And second on UltraFan. I understand that you don't have an engine for an aircraft, so it's a very difficult to answer that question. But what sort of RRSPs do you have in mind for that programme?

Warren East: Okay, so spare engines, 50 spare engines delivered in 2018. And spare engines are an important part of the whole ecosystem for the airlines and ourselves. Particularly important in 2018, of course, with Trent 1000 issues to have spare engines available to help service that particular issue. We're not expecting significant growth from the 50 in 2018. You might be thinking around sort of 60 or so, but not massively dissimilar from the number that we saw in 2018.

Stephen Daintith: And the risk and revenue sharing partners for UltraFan engines, probably the usual suspects. I couldn't be any more specific than that at the moment. I mean, it's a new architecture but it's still a gas turbine and we still need to work in the domain, so it will be the usual suspects.

Jeremy Bragg (Redburn Partners): Thank you. Jeremy Bragg from Redburn. One question on working capital. Sorry to keep hammering away at this. So there's a £400 million benefit from payables, which I guess reverses next year, so that's £400 million in my free cash flow bridge as a negative. What I don't really understand is exactly what happened with the engine concessions because that was a big benefit last year and you've given this number of £150 million and I don't know whether that's an absolute number or a bridge number. So did you, in fact, see a £600 million headwind this year in respect of engine concessions, which was offset by the £400 million positive. Great. Thank you.

And then the next question again a clarification please. You said breakeven on the portfolio for OE engines by 2022 but unless my mind's playing tricks, I thought the last deck said £0.4 million loss per engine please?

Warren East: Yeah, well, maybe I'm thinking sort of midterm 2023 but that's the direction that we're in, so we're on.

It's maths. And we'll look at the difference between those two things. But as we sit here today, we're on that trajectory in the medium term. And as I said in answer to a question, I wouldn't want us to pin too accurately. It has to be zero at this particular month because it is going to depend on the product mix that we're actually shipping at the time.

Jeremy Bragg: Understood. Thank you.

Warren East: Thank you. I'm sorry, we're out of time. But thank you all very much for your attention.

[END OF TRANSCRIPT]