

# 2020 Full-Year Results

Thursday, 11<sup>th</sup> March 2021

## **Preamble**

**Operator:** Thank you for standing by, and welcome to the Rolls-Royce 2020 Full-Year Results. At this time, all participants are in listen-only mode. There will be a presentation followed by a question-and-answer session, at which time if you wish to ask a question, you'll need to press star followed by one on your telephone. I must advise you that your conference is being recorded today, Thursday 11<sup>th</sup> March 2021. I would now like to hand over to the speaker for today, Isabel Green, Head of Investor Relations. Please go ahead.

#### **Safe Harbor Statement**

Isabel Green

Head of Investor Relations, Rolls-Royce Holdings PLC

Welcome, everyone, to our 2020 full-year results presentation. With me today are Warren East, CEO, and for his final results with us, Stephen Daintith, CFO. Also with us today is our deputy CFO, Ben Fidler.

We'll start the presentation shortly with an introduction from Warren, followed by a more detailed review of the results by Stephen. And lastly, returning to Warren for an update on our outlook and strategy. In all, this should take about 40 minutes, leaving plenty of time at the end for Q&A.

Before I hand over to Warren, please take note of the Safe Harbour Statement on slide 2. This results presentation contains forward-looking statements that involve risk and uncertainty that may cause actual results or developments to differ materially. A full set of results materials can be downloaded from our website. Thank you. And over to you, Warren.

### Introduction

Warren East

CEO, Rolls-Royce Holdings PLC

Good morning, everyone, and thank you for joining us. Now, before we look at our performance in detail, I'm going to reflect for a moment on the extraordinary and unprecedented year in 2020. And you can see from the images on the top of the slide there about just how devastating it was for our sector. It was also devastating for many people.

Safeguarding our people and business

It was a year where our colleagues made many personal sacrifices, and despite all the challenges, they still managed to dig deep to find the solutions to help keep our company strong for the future. And I'm very mindful of the fact that around 7,000 of our colleagues, some of whom have worked with Rolls-Royce for many years, have left us as we took actions to restructure and protect our business. And I thank all of those colleagues, both past and present for their contributions, their diligence and their hard work.

Looking at the images on this slide, I'm particularly proud of the practical support that our people have given to the communities in which we work, doing things such as making face

shields and volunteering to help those in need. As a company, we also endeavoured to give back to our community. We launched the Emergent Alliance, and that's now grown to more than 140 members. And we've worked together there as a community using data analytics to assist economic recovery. Here in the UK, we also joined the ventilator programme, and we've been providing home learning and stem materials to encourage online learning for young engineers and inventors of the future.

Finally, of course, I must thank our investors and our lenders who helped us and gave us additional liquidity to weather this crisis. So as we move forward, preparing for the recovery and investing for the future, we're very aware of the responsibility that we now have to honour the support we've received from all of our stakeholders by delivering on commitments that we've made and achieving those goals.

## Group Performance

So now moving on to group performance, I'm on slide 5. When COVID arrived early in 2020, it had an immediate and very material impact on our business. If you remember, we came into 2020 with great positive momentum, and that momentum that we had at the start of the year was overtaken. In response, we took decisive and effective actions to protect our people and protect our business.

We introduced new ways of working to protect our colleagues, and that has enabled us to maintain operations throughout with minimal disruption. We took mitigating actions that saved more than £1 billion in cash. We secured more than £7 billion of additional liquidity to secure the future, and we embarked on a very large restructuring – the largest restructuring in our history, to fundamentally change the economics of our civil aerospace business. And that's going to save more than £1.3 billion of annual costs on an ongoing basis.

We've also committed to rebuild our balance sheet, which is supported by a disposal programme where we're targeting more than £2 billion from disposals by 2022. Now, despite the enormous pressure on cash and the cost reductions, however, we managed to continue to invest in sustainable low carbon solutions for the future. And I'm going to come back and say much more about that later in this presentation.

### Business highlights

But now, looking at the business highlights for 2020. I mean, the impact of COVID on our business, you can see on the right-hand side of the chart different businesses affected in different ways. The impact of COVID was most acutely felt in our civil aerospace business, with engine flying hours reducing sharply in April to less than 20% of 2019 levels. And as the year progressed, those flying hours gradually recovered.

Now, while the rollout of vaccines and testing gives us good reason to look forward to the recovery, the impact on our industry is severe, and OE demand is expected to remain low for several years. On large engines, on wide-body aircraft, that's where we're most exposed to the downturn. International and business travel particularly was affected, and that's likely to recover slowly.

Regional and narrow-body flights have been marginally less affected with fewer cross-border routes. Business aviation was relatively resilient, and that was helped initially by repatriation flights at the start of lockdown and, of course, much less exposed customer base.

Now, we've made good progress on our fundamental restructuring programme in civil, around 5,500 of the roles removed so far from our business are from civil aerospace. And that will, of course, give us permanent cost efficiencies and help reshape the economics of our business for the longer-term. And I'll talk more about that later in this presentation.

Despite the challenges, we've managed to continue to serve our customers. We've managed to design and manufacture solutions and invest in new technology. We've achieved our target of eliminating aircraft on the ground due to the Trent 1000 durability fixes. And we've now got enough parts and MRO capacity there on Trent 1000 to avoid a recurrence of any customer inconvenience, even if miraculously all travel restrictions were lifted today.

In ITP Aero, we've seen, of course, similar market dynamics because civil aviation accounts for about 70% of ITP revenues and defence activities in ITP, contributing the rest, but that performed relatively resiliently.

Power Systems was less affected than our civil aerospace but still quite affected by what happened. But it has a number of end markets, each with its own dynamics, and that has helped to balance the business performance in power systems. Government end markets, for instance, where the most resilient, whereas Industrial and Marine suffered from the impact of lower economic activity and lockdown restrictions. Our strategy in Power Systems to grow in China also helped the overall performance of that business, with structural growth and market share gains continuing, and our solutions to support and enable the transition to lower carbon power have had a good year, driven by investments in batteries, hydrogen fuel cells and hybrid systems.

And moving to the bottom of the slide; Defence. Defence had a good year because our government customers remained committed to the programmes that we're delivering, and our order book remained strong. And this year has – or 2020 – has been a real reminder of why the Defence business is an important one for our group delivering profit growth, even in what turned out to be the most challenging of years across the rest of our business.

Now I'll hand over to Stephen to talk more about our financial performance.

## **Financial Overview**

Stephen Daintith

CFO, Rolls-Royce Holdings PLC

Thanks, Warren. And good morning, everybody.

Group underlying results

So our full-year 2020 results were severely impacted by COVID, as Warren has just outlined. In addition to the trading impact, there were a number of large onetime charges in our underlying and reported results now. Now, they're shown here on this particular slide, slide 8. These charges were mostly incurred in the first half of the year when the outlook suddenly deteriorated. Group revenues declined by more than 20%. This reflected the drop in activity in civil aerospace, ITP Aero and Power Systems, but also the impact of a £1.1 billion negative catch up charge on our civil aerospace long-term service agreements. This related to changes

in the outlook on our long-term contracts as a result of COVID, which led to the derecognition of some of the revenue that had been booked in prior years.

Now, we had a gross loss of £512 million in 2020. This included £1.3 billion of onetime charges, most notably the impact of the contract catch ups that I've just talked about. Although the gross profit charge was slightly lower than the revenue impact, after taking risk and revenue share partners into account.

In addition, we took a £230 million charge related to onerous or loss-making contracts. Now, we don't have many of these, and they are mostly related to the Trent 900 engines on the Airbus A380's. As the largest passenger plane in service, these have been particularly affected by the fall in passenger demand.

It's been a very tough year for everyone in our industry. A number of our customers have had challenges with their liquidity and financial stability. We have responded commercially with relaxations of certain terms and conditions, and we're keeping a close watch on the customer credit risk.

Prudence requires that in some cases, we provide for specific customer credit risk, which is why we have taken an £86 million charge in this respect. The final large charge on our underlying results is the £1.7 billion financing cost charge related to our hedge book. Our US dollar hedge book provides cover for transactional currency risk because our dollar receipts usually exceed our dollar costs.

The impact of COVID on our future forecasts left us significantly over-hedged. And so, in 2020 and early 2021, we reduced the hedge book at a cost of £1.7 billion spread over the next six years.

#### Divisional performance

Now, you can see on this slide the business unit performance in more detail. As Warren has already talked about, the market drivers of our performance, so I won't need to cover those again. What you can see here is the scale of the impact of the drop in performance in civil aerospace has had on the group, as well as the impact of the COVID-related onetime charges, which make up most of the loss. Power Systems Defence and ITP Aero all contributed positively to operating performance, albeit only defence achieved the year-on-year growth up eight percent on 2019.

### 2020 cash mitigations successfully delivered

Now, this next slide details the successful mitigating actions we took this year to help protect our financial and liquidity position. We've had a laser-like focus on cash costs, culminating inyear savings of more than £1 billion compared to our plan at the start of the year. The largest savings of around £500 million came from a reduction in pay and benefits.

Now, this was a result of three key things—number one, a pay cut to senior managers during the nine months between April and December. Secondly, support from government furlough schemes. And thirdly, savings starting to come through from the reduction in roles in the second half of the year.

Furthermore, we reduced our capital expenditure by around £300 million. We stopped all non-essential spend and rephased some of our projects. About two-thirds of our savings were in civil aerospace, where earlier plans to increase capacity was shelved, as we now

expect to meet the forecast close within our existing facilities. We've reduced the pace of investment in spare engines, and we've also challenged capital plans across the group.

Engineering spend was also reduced as industry-wide delays have allowed us to slow down our R&D spend without jeopardising our commercial objectives. We've also saved on third party costs and travel and absorbed the additional investment needed to make our workspaces COVID secure.

Now, most of our mitigations were onetime or temporary. However, some of the savings are expected to roll into our fundamental restructuring programme, helping to deliver the £1.3 billion of annualised savings by the end of 2022.

Achieving more than £1 billion of savings so swiftly is testament to the collaboration, dedication and focus from everyone in the business. Not only have personal sacrifices been made, but we have pulled together to find savings, no matter how small, to contribute to the group-wide effort to protect our business. I'd like to thank everyone at Rolls-Royce for the part that they have played delivering this extraordinary response to the COVID crisis.

Free cash flow: explaining 2020 deterioration

Now, on this next slide, we had a £4.2 billion group free cash outflow in 2020 compared to a £900 million inflow in 2019. This £5.1 billion year on year movement can be divided into three broad categories.

Firstly, compared to 2019, there was a £3 billion impact from operational factors. So, this is mostly due to the lower engine flying hour receipts from the long-term service agreements, but also includes lower time and material receipts and the impact of under-recovery of fixed costs, particularly on civil OE original equipment volumes. Although Power Systems and ITP Aero contributed positively to group cash, they were down year on year, which was only partly offset by growth in defence.

Secondly, we had a £2.1 billion swing in working capital, moving from a £0.4 billion inflow in 2019 to a £1.7 billion outflow in 2020. And this was mostly due to our decision to stop invoice fracturing, which resulted in a £1.1 billion adverse one-off timing impact to cash.

The rest was a reflection of the underlying reduction in working capital as our activity levels diminished significantly in 2020. This compared to the previous trend of cash inflow from working capital as we grew the business.

Now, finally, there were a range of other smaller factors moving in both directions, which largely net each other out. Included within these are the costs of closing out the hedges in 2020, as well as the positive swing of around £400 million from the lower capital spending due to our cash mitigations.

Summary funds flows:  $\pounds(4.2)$ bn free cash outflow in 2020

This next slide shows how these three movements show up in our summary funds flow in more detail. The civil aerospace net LTSA balance grew by £479 million in 2020, which may feel a little counterintuitive given the significant fall in flying hours. Now, this is the result, though, of the £1.1 billion contract catch up to revenues that I outlined a little while ago.

Typically, we expect to see an increase in the LTSA balance as we grow the fleet. However, this year, if we adjusted out the catch-up effect, we had a reduction in the LTSA balance as

revenues, which, as you know, are driven by shop visits, were larger than the flying-hour receipts. The £138 million movement in provisions is the net result of new provisions for onerous contracts offset by the reduction in provisions related to the Trent 1000 in-service costs.

You can also see here the £202 million cash impacts of closing out unutilised hedges. Although the cash headwinds from the hedge book and Trent 1000 fixes are substantial and multiyear, they are not permanent elements of our cash flow. In 2020, the cash impact of these combined was around £700 million. Moving on to 21 and 22, they are expected to be around £800 million and £500 million respectively. But beyond 2023, importantly, the headwind from Trent 1000 is expected to de minimis.

The last of the hedge costs will be in 2026. Now, further details of these are included in the appendix slides.

# Liquidity strengthened to 9.0bn

Moving on to the next slide, we strengthened our liquidity in 2020 to cope with the uncertain outlook and near-term cash impact of the COVID crisis. At the start of 2020, we had £6.9 billion of liquidity and a net funds position of £1.4 billion. Our £3.1 billion of debt included  $\[ \in \]$ 750 million of bonds maturing in 2020 and \$500 million maturing in 2021.

Now we had expected to cover these maturities with the cash generated by the business. With the arrival of COVID, we took the precaution of drawing down on our £2.5 billion revolving credit facility, which had a duration out to 2024.

As the extent of the pandemic became apparent, we took the necessary actions to ensure that we would have enough liquidity and a sufficiently long maturity profile to manage even in a severe but plausible downside scenario. We agreed new loan facilities, £1 billion with a two-year term and £2 billion with a five-year term. And we lengthened the £2.5 billion revolving credit facility to 2025.

We were supported by the UK Credit Export Agency with an 80% guarantee on the five-year term loan. In the fourth quarter, we added to this with a £2 billion bond issue and a £2 billion rights issue, which were both well supported by our investors.

This leaves us all in a strong liquidity position with around £9 billion at the start of 2021, and most of our debt does not mature until at least 2025. This gives us the strength to weather the near-term cash outflows, and we expect to return to generating cash from operations in 2022.

Today, we have £5.5 billion of undrawn facilities. And additionally, we have just agreed a £1 billion extension to the five-year term loan with the UK export finance and our syndicate of banks. We do not expect to draw in this extension, even in a downside scenario, but it provides an important safety net.

## Strengthening our balance sheet

Moving on to the next slide, our strong liquidity will therefore see us through this crisis, but afterwards, we will need to rebuild our balance sheet. We do not intend to remain in the net debt position. We're in a cyclical industry and need a strong balance sheet to be able to weather the storms without jeopardising our commercial position or our through cycle investments.

The first step on the road to financial recovery came from the support of our shareholders, with the £2 billion proceeds from the rights issue in 2020. We expect to at least match this with proceeds from disposals, which I'll say more about in a moment. The remainder of the bridge comes from cash generated organically from operations. The actions we are taking to restructure the business and the expected recovery in engine flying hours should enable us to get back to a healthy cash generation by 2022. This underpins our ambition to reach a net cash position in the medium term, consistent with an investment-grade credit rating.

### Progress on disposals

Now, on this next slide, before I hand back to Warren, I promised to say a bit more on our plans for asset sales.

We've got off to a good start with two disposals already agreed and due to complete later this year. Firstly, we agreed the sale of our civil nuclear instrumentation and control business to Framatome. Secondly, we agreed to sell Bergen Engines to TMH International. Now, this transaction has been temporarily paused at the request of the Norwegian government to be further reviewed by them. It is not for us to speculate on the outcome of the government's review. However, it should be noted that the sale of Bergen is only one part of our disposal programme. Although both of these are good businesses, neither of them were central to our future strategy, and they did not generate any material profit or cash flows. Between them, they generated about £300 million in annual revenues.

The largest of our planned asset sales is ITP Aero. We've started the disposal process with the proposed transfer of our Hucknall facility and some of the work from Barnoldswick into ITP. We are holding talks with a number of interested buyers. No one has been ruled out, and we are working closely with all the key stakeholders to find the right path forward.

We've got a number of other assets under consideration too, not just in civil aerospace but across the group. We're not in a position to name these yet, as they are at a relatively – still in their early stages. But we expect to see further progress by the end of 2021 on all processes.

Now - I'll now pass back to Warren to discuss our outlook and our strategy.

# **Recovery and Outlook**

Warren East

CEO, Rolls-Royce Holdings PLC

Thank you, Stephen. Okay, let's move on. Now, as I said before, this has been an unprecedented time. We have faced up to the challenges with decisive and effective actions to take control of the things we can control and manage the things that we can't control. And within that framework, we have three clear priorities as we look forward.

Positioning for the recovery and creating a sustainable future

First of all, restoring our financial performance and thinking about how we maximise value from our existing capabilities for the medium term and looking further forward, how we deliver the science-led innovation in sustainable power that's going to take us forward into the longer-term. And I'm going to take each one of these in turn.

So let's start with our financial performance and how that changes. We'll step back for a moment and look at the global economy. The impact of COVID on the global economy has been greater than any other event in recent history, as you can see from the chart on the top right here. Nonetheless, there is cause to be optimistic about a V-shaped recovery, and that's underpinned by the efficacy of vaccines and the decline of infections in locations where vaccinations and testing have been rolled out. The initial data is very encouraging.

The pace and timing for opening up borders, however, remains uncertain today. But it's clear from our airline customers that there is significant pent up demand from consumers for flights just as soon as they are able to resume, and this could be accelerated by vaccine passports, air bridges or other risk-based approaches between countries with low levels of infection.

# Despite uncertainty, prevailing views expect a GDP recovery in 2021

Now, in civil aerospace, there is, as you know, a historic correlation between GDP and flying, with growth in passenger miles increasing at around one and a half times the pace of economic growth. And there's also a strong link between the development of a country's economy and the penetration of flights per person. And as a result, fast-growing economies with low levels of air travel fuel the long-term expected growth trends for our industry in the coming decades.

And this makes it hugely important that we develop the right low carbon solutions that will support these economies to develop cleanly and sustainably. And I'm going to elaborate more on that in future.

Now, Power Systems is also a GDP Plus business, but unlike aerospace, it doesn't have particular issues around opening up of travel corridors and government to government agreements. And so we expect the V-shaped recovery in GDP to result in a faster recovery of revenues and profits.

Defence, as I said earlier, has been less impacted by the crisis. It's also less impacted on an ongoing basis by fluctuations in GDP because government allocations are driven more by the need for investment based on geopolitical risk. And actually, we don't see that geopolitical risk changing anytime in the near future. But of course, there will be pressure, or likely to be pressure, at any rate, on total government budgets in coming years as they seek to repair the economic and social damage that has been caused by COVID.

### Power Systems and Defence

So moving on to slide 19, talking about defence and power systems, I'll start there with a little more detail. Power Systems and Defence have been the bedrock of support for us this year, and they've contributed over half our revenues and generated both profit and cash for the group. Power Systems provides the power for industrial and agricultural growth, as well as travel and infrastructure. And reliable power is critical for continuity of services. And our microgrids and backup power solutions can provide that. And as we see economies reopen and get back to business, so we expect our customers' capital expenditure cycle to accelerate, and that will drive a sharp recovery in demand for our OE and for aftermarket services.

And so we see our Power Systems business returning to 2019 revenue levels by 2022, along with a margin recovery back to double-digit levels. And that is helped by structural growth in

China that I mentioned before and increased pace of development of low-carbon solutions, as well as the general recovery from COVID.

In defence, we have a stable outlook. We have a strong order book. We're working continuously in that business to offset inflation and pricing pressure with savings and operational efficiencies. And we think that we're in a good position to benefit from future programme opportunities as they emerge.

Near-term air traffic outlook is uncertain, but vaccines and testing support recovery So now, let's look at civil aerospace on slide 20. Clearly, the pace and timing of recovery and engine flying hours remains uncertain, but the progress on vaccines and testing is encouraging. At the start of the year in January, we updated our expectations for 2021 to reflect the challenges that the world is seeing from new virus variants and new national lockdowns and our view of a recovery in 2021 we modified – and this is particularly about the

Rolls-Royce fleet, by the way, but we modified to an average of around 55% of 2019 levels.

And that remains unchanged as we sit here today.

Today, activity is actually below that level. But based on third party projections and conversations with our airline customers, we expect the recovery to pick up in the second half of the year as flights fill up and airlines open more routes. And this recovery is likely, of course, to be led by short-haul leisure demand, and that will be followed by business trips and long-haul journeys.

Now, turning to our expectations for engine flying hours in 2022, we're now expecting around 80% average flying hours in 2022 compared to 2019. And that's different from the 90% we talked about previously. The impact of this downward revision on our £750 million cash target has been mitigated by additional management actions and our latest view on certain cash movements.

We've also refreshed our plausible and severe downside scenario to make sure we're well prepared should the recovery take a little longer. Full details of our scenarios are included in the press release. But in summary, we see a reasonable worst case of around 45% of 2019 levels in 2021. That's flat on 2020, but it's a bit higher than the levels we're seeing today and approximately 70% of 2019 in 2022.

So we continue to see a disparity between the different engine programmes; the chart on the top right-hand side of the slide. And you can see that shows that the newer, more efficient aircraft and engines are the ones that are recovering faster than the more mature ones. And that's, of course, driven by the economics for airlines as they look to minimise their operating costs. And it's also driven as well by the geographic mix and customer concentrations of our fleet. You can see our Trent XWB engines have been the fastest to recover. They've already reached around 60% of flying hours by the end of 2020. And that's followed closely by the fleet of Trent 1000.

And, you know, one of the bright spots for the whole industry last year was the winning combination of our Trent XWB engine on the Airbus A350. This is the most fuel-efficient wide-body aircraft in the world, and it has versatility to serve both long haul and short-haul routes. Now we're already exclusive on the A350–1000 variant of the aircraft. And we are extending our position – our exclusive position on the A350 900 variant. And that accounts for the bulk of the A350 fleet. And that extension is agreed with Airbus out to 2030. That's in

line with the development timeline for our next generation ultra-fan engine programme. And just to remind you, by the way, that we're also the exclusive engine provider for the A330 Neo with a Trent 7000.

#### Fundamental restructuring

So slide 21. I've talked so far about recovery factors that we can't control, engine flying hours, behaviour of airlines and the like. Now I'm going to talk about things that we can control.

We were quick to recognise the need for self-help actions to control our cost base and position our business for the future last year, and in May, we announced a fundamental restructuring programme, the largest we've ever undertaken. The impact on our people of a change programme of this scale cannot be underestimated. And we didn't – certainly did not take this decision lightly.

We're consulting with colleagues on the proposed actions. We're working with unions and employer representatives to try to limit the number of compulsory redundancies and protect as many livelihoods as we can. We've increased support for mental health and wellbeing. And we're helping those that are affected by redundancy to find alternative roles, sometimes elsewhere in Rolls-Royce, sometimes outside of the company.

But the outcome we're targeting is clear. We need to restructure our cost base and eliminate the under-recoveries, and set up the framework that will enable us to recover strongly when activity levels return. So we've set a target to achieve annualised pre-tax savings of more than £1.3 billion by the end of 2022. And our plan for this includes the removal of more than 9000 roles. And most of those are in our civil aerospace business.

It includes consolidation of our operational footprint and cost discipline right across the business. And we're also looking to keep our capital expenditure low, and we're aiming to be at the better end of our peer group range of 3-4% of revenues in that respect.

Now, we made a strong start in 2020. In 2020, around 7000 roles were removed across the business, mostly through voluntary severance programmes, but also as a result of hiring freezes, fewer contractors, some compulsory redundancies. We also began consultations to consolidate the major civil aerospace operating sites, consolidating 11 sites down to five, with activities being moved to the most productive, cost-effective hubs and a reduction in the duplication of work in multiple locations. We're engaging with all the stakeholders to make sure that our actions are both fair and effective.

# Changing the economics of civil aerospace

Now, let's have a look at the economics. The changes are fundamentally altering the economics of our civil aerospace business and shown here on slide 22.

The majority of our cost savings are targeting fixed costs in our civil aerospace business. We're reducing headcount by approximately a third, and we're looking to lock in substantial savings from those site consolidations and efficiency improvements. And on top of that, most of the planed group capital expenditure savings are also in civil aerospace. And there, we have a reduction of more than 50% versus the 2019 levels. And that's, of course, helped by the growing maturity of our newest engine programme. So some of that CapEx was going to reduce anyway.

At the same time, we're seeing our variable costs reduced with load, but we're also pushing those variable costs even further. We're challenging ourselves to achieve better pricing and engineer greater efficiency to reduce per-unit costs and wastes. It really is a fundamental transformation of the civil aerospace cost base. It's a programme of self-help, and that will enable us to create a stronger business with more sustainable cash generation and a permanently lower fixed cost base, regardless of whatever the pace of recovery happens to be.

## Cost actions support strong cash flow when market recovers

And as the next slide shows, it sets us up well to benefit from huge operating leverage as the market recovers. So let's look and see what that means for our future cash flows on slide 23.

We can't control the pace and timing of recovery, which in turn, is the main driver of recovery in both the aftermarket and OE receipts part of our business. So those are the blocks above the axis. But what we can control of the blocks below the axis, which I've just talked about on the previous slide, but here you can see spread out in time.

We can influence the rate of cash burn during the downturn and also, consequently the operational leverage that we enjoy as the flying hours improve. I mean, 2020 large engine flying hours were 43% of 2019 levels, and we delivered around half as many of new large engines. Business jets and regional did show more resilience. But still, the fall in receipts was quite significant.

And you can see our response in the reduction of the turquoise bars below the line representing the operating cost and capital spend. And that begins in 2020 with the cash mitigation that I talked about. But it continues in 2021 and 2022 as the restructuring programme makes those savings permanent and expands them even further.

However, due to supplier lead times and working capital movements in 2020, it simply wasn't possible to reduce our total costs at the same pace that we saw in the fall in receipts. And that's what drove the civil aerospace trading cash outflow of £4.6 billion. In 2021, this does begin to improve because purchasing reduces with lower volumes. And as we're able to turn off those taps, we still have a working capital headwind to contend with. And that is driven primarily by the OE concession payments that we talked about shortly before Christmas as a backlog of 787 aircraft are delivered by Boeing. And that triggers payments from us to airlines.

The timing of this is completely outside of our control, and while we expect significant concession outflow in the first half of 2021, it may slip a little bit to the right. Nevertheless, you can see the cash flow as a whole begins to improve in 2021. Once the market recovers more fully, you can see civil aerospace returning to positive cash flow and assuming flying hours reach approximately 80% of 2019 levels on average in 2022, we will see the civil aerospace business delivering cash flows that support our group ambition of at least £750 million of free cash flow.

Looking longer-term, the actions that we've taken to change our cost base and position for recovery mean we're confident we'll be able to keep those costs low as volumes increase and that will deliver better cash margins in future than we have achieved in the past.

So that brings me back now to the group outlook for the near-term on slide 24. We're expecting free cash flow of around about £2 billion in 2021. The first half will see the worst of the outflows, mostly due to the shape of the expected flying-hour recovery and the timing of those concession payments. In the second half, there should be benefits as a vaccine and testing allow more routes to reopen and working capital pressure begins to ease on those concession payments.

Both halves are expected to see cash outflow overall, but at some point during the second half of the year, we expect net cash outflow to become net cash inflow, marking the inflexion point in our recovery.

Now, as we move into 2022, we expect those improvements to continue and drive sustainable positive cash inflow. And that could total as much as £750 million in the year as a whole in 2022. Now, that's not adjusted for any disposals that may have completed by then, but it does remain contingent on the recovery in flying hours to at least about 80% of 2019 levels.

Now, despite the uncertainties of the exact timing of that, we're confident that over a 12-month period, starting at some point in 2022, we're going to achieve that target. Looking further ahead, our ambition to get back to at least £750 million as early as 2022 includes up to £500 million of temporary headwinds from the Trent 1000 fixes and the closure of our over-hedged positions. So our projected future cash flows will benefit as these diminish in the years going forward.

## Positioning for the recovery and creating a sustainable future

So slide 25, now that that's effectively covered how we are restoring our financial performance, I'm going to move on to how we're positioning ourselves for the recovery and creating a sustainable future.

And that's about two things. First, by maximising the value from our existing capabilities in civil, in Power Systems and Defence, and secondly, through the science-led innovation in sustainable power that we talk about quite a bit. And that includes exploring opportunities with things like sustainable aviation fuels, exploring opportunities around hydrogen. And I'll come on to talk about that in a moment.

#### Maximising value from exiting capabilities

So on slide 26, maximising the value from our existing capabilities, it's all about what we can do in each of our business units to really capitalise on our position. We've invested heavily in civil aerospace over recent years, but that major investment cycle is now largely complete, and our fleets are amongst the youngest in their respective markets. So the focus now is on extracting aftermarket value from that installed base with more than 5000 large engines and 7000 business jet engines. And we can do that by improving time on wing and continuing to reduce the cost of components.

Similarly, in power systems, we've got an installed base, more than 150,000 large engines, which gives us a great foundation to build upon. We're also exploring how we can really grow our strategic position in China, which is a fast-growing market for Power Systems, as well as commercialise our electrical hybrid and hydrogen solutions.

In defence there are two particularly notable engine programmes, and we're awaiting decisions on those in the next two years or so. These are the B52 re-engine programme and

the Future Vertical Lift programme, and together they have an estimated lifetime value of more than £7 billion. And we're also continuing to work on through life upgrades to engines in service line.

## Investing for the future

Slide 27 shows what this means for our capital allocation. On the left-hand side of the slide, you can see how we're pivoting our mid-term investments away from civil towards Power Systems and Defence because, as mentioned, the major investment cycle in civil is now largely complete. And in 2019 and 2020, we spent more than 70% on civil aerospace and ITP Aero. But looking into the medium term, we're going to see that decline, and it will be more like 50%.

Now, if we look at the chart on the right, we can look at that capital allocation through a different lens. This is the lens where we are accelerating our focus on carbon – on low carbon technologies and through self-funded and disciplined R&D. And as we move towards the midterm, the proportion of our investments in low carbon next-generation engines will really be the lion's share. The current investment in current technology falls from around two-thirds in 2019 to around a quarter in several years' time. And that rapid shift in investment spend reflects net-zero ambitions.

If we're to become a carbon-neutral business by 2050, and that means enabling the markets that we serve to be net-zero by 2050, then it's vitally important that we take the steps now that will enable us to create more sustainable power in the future.

#### Low carbon technologies

Slide 28. So, I'm going to take each of these in turn and start with low carbon. Firstly, UltraFan. Our next-generation aero engine. As many of you will know, this new engine architecture is forming an exciting part of our sustainability journey. For starters, it is 25% more fuel-efficient than the first generation of Trent family engines. It's also 100% SAF compatible, sustainable aviation fuel compatible. Now, that efficiency is very important as SAF will inevitably be more expensive than fossil fuel, to begin with.

Now, I mentioned SAF a moment ago, and there's a lot of interest in this area recently. So just touching on that for a moment. For journeys over 1000 nautical miles, alternatives like electric solutions and hydrogen solutions become very challenging or even impossible. So for Rolls-Royce, we see the use of SAFs or sustainable aviation fuel as being vital, and they require little change to our existing engine architecture and what we're working on with partners in the industry, as SAFs that can be simply dropped into the engine. They also have higher energy density and fewer impurities. And additionally, they can be created synthetically using captured carbon using a zero-carbon energy source. And that's what gives us our net-zero.

You may have read the announcements we've made recently about successful tests on our wide-body business jet engines. We've also been testing SAFs in our defence engines and all the results have been extremely promising. However, it's not just aviation that can benefit from more sustainable fuels. Our Power Systems business also has a separate unit called Power Lab, and that's dedicated to our sustainable future. And then we're exploring the use of synthetic fuels in our power systems portfolio.

Our hybrid electric solutions reduce further CO<sub>2</sub> impact, and we're embracing hybrid solutions in many different areas across the group. You've seen pictures of hybrid trains before from power systems. In power systems, here on the bottom of the slide, we have a picture of a hybrid electric engine based on the series 2000 engine. That's ideally suited for yachts and provides increased power and lower noise pollution.

## Enabling net-zero

Now let's turn to slide 29 and talk about enabling net-zero.

Now, remember an UltraFan engine running 100% synthetic aviation fuel generated from net-zero electricity is indeed net-zero, but we're doing more. As with SAFs, there's been a lot of interest and excitement in the aviation sector around the use of hydrogen. And just like others in the industry, of course, we're exploring the fundamentals of hydrogen in aviation. It's a very exciting area and one that really pushes the boundaries and pushes the boundaries – uses our existing engine technology. Our existing engine technologies could be adapted relatively easily to utilise hydrogen.

There are large challenges for the industry more broadly, however, to overcome. But it's exciting to see the effort building around hydrogen. I'm confident that we have the technical capability to support our aviation customers if that is indeed the direction in which the industry moves.

Aside from the use of hydrogen in aviation, there are also many opportunities for hydrogen in our Power Systems business. We're cooperating, for instance, with Daimler Truck on stationary hydrogen-powered fuel cell generators, and that would act as a CO<sub>2</sub> neutral emergency power generator for critical facilities like data centres.

And we're also working on ways to make energy storage more carbon neutral. We recently made a majority stake in the acquisition of Qinos, which is central to our microgrid solutions, enabling renewable power and energy storage.

I would also like to talk about SMRs or small modular reactors. You've heard us talk about that before. Rolls-Royce has unique expertise in high-density nuclear technology from decades of experience in defence. SMRs are small nuclear power stations which are factory built, which have the ability to deliver electricity in a net-zero way. In turn, this electricity could further contribute towards our net-zero ambition, as, of course, it could be used to power the synthetic production of SAFs or indeed of hydrogen, and we have UK government support for SMRs and we're targeting the first power by 2030. They have much lower CAPEX requirements; much smaller footprint per gigawatt.

#### Enabling net-zero: electric aviation

Now, turning to slide 30, I'm going to come back to aviation and the progress we're making in electric aviation. It's particularly important for small and medium distance journeys. And is an area where we're seeing a huge amount of interest in growth.

Now, you may have noticed on Tuesday that we announced our first commercial deal in the urban air mobility market. It's a very significant step towards commercialising our technology. The deal with Vertical Aerospace uses a Rolls-Royce electrical power system which will be integrated into the piloted eVTOL vehicle. It's also particularly exciting as it has the potential to transform the way that people and freight move from city to city.

In the commuter and regional space, we've got a partnership with Italian airframer Tecnam to jointly develop the P-Volt. That's an 11-seater aircraft and an all-electric battery fuel cell configuration. And today, I'm announcing that we are expanding the successful research programme between Rolls-Royce and Widerøe to cover all elements of developing and delivering the zero ambitions people commuter aircraft that could be used in the Norwegian market from 2026.

In the small propeller space, you might have read our announcement earlier this month that the spirit of innovation aircraft, part of the ACCEL programme, achieved another major milestone. It's on track to be the world's fastest electric aeroplane. It's successfully did its taxiing trial propelled by its 50 horsepower or 400-kilowatt electric power train. And we are hoping to see the first flight of that aircraft in the spring.

### Summary

So let me summarise before we end our presentation today, just a reminder of what we've been talking about, the decisive and effective actions we've taken to address the challenging market conditions we faced in 2020. We made in-year cash savings of more than £1 billion from one-off mitigating actions, with the support of our stakeholders. We've strengthened our liquidity position to increase the resilience and support our long-term strategy. We've also made strong progress on our fundamental restructuring programme, and we've commenced our disposal's programme to raise over £2 billion in proceeds.

If we look forward – ahead to the recovery, then we're confident that those restructuring actions that we've taken in 2020 will enable us to have permanent cost efficiencies. We remain committed to supporting the decarbonisation of our end markets by pivoting our R&D and CAPEX towards lower carbon solutions. And I'm confident we'll be able to offer – continue to offer growing low carbon technology for a more sustainable future.

Now, before I hand back to the operator now for Q&A, as I mentioned, or in fact, as Isabel mentioned, the start of this call, this is Stephen's final full-year results with us. And I'd obviously like to thank Stephen for all his hard work and support, particularly during the recapitalisation efforts of the last year. I want to thank him for his friendship over the last four years as well and help with putting this business back where it belongs. So thank you, Stephen. I think Bacardi is very lucky to have you, and now, as the rest of you know, Ben Fidler, who's here with us today, is stepping up to the role of interim CFO for a few months until our new CFO, Panos Calculus, joins us in May.

And with that, I'd like to thank you all for listening and hand over to the moderator for Q&A.

# Q&A

**Operator:** Thank you. As a reminder, ladies and gentlemen, if you do have a question for comment, please press star one on your telephone and wait for your name to be announced. If you wish to cancel your question, please press the pound or the hash key. Once again, it's star one for any questions or comments. We have our first questions coming from the line of Andrew Humphrey from Morgan Stanley. Please ask your question.

**Andrew Humphrey (Morgan Stanley):** Hi, thanks very much. I've got a couple, if I may? One is on – on flying hours. I mean, I think on – over January and February, Rolls-Royce flying hours, as far as we can tell, were around 36% of 2019 levels. Assuming they stay at a similar level over the rest of the first half, are we effectively saying, you know, we need to be at 75% of 2019 levels in the second half to meet the cash guidance for this year?

And my second question is a bit longer-term around XWB. You've obviously secured the exclusive position on the 900 until 2030. I was curious about the reason for specifying that variance.

I mean, I assume that the 800 and 1000 would not be sufficiently large volume opportunities in themselves for a competitor to make significant inroads in there. I'd be interested in your view on that. And also, does the kind of specification of sort of 2030 as an end date for that exclusivity mean effectively, you know, that could be dual-sourced from 1<sup>st</sup> of January 2031? Thank you.

**Warren East:** Right. Thanks very much, Andrew. Well, let me take – let me take both of those. I mean, the – the engine flying hours, undoubtedly, we can see what's happened in the first couple of months. And there are – there is a huge amount of uncertainty still in the timing of the recovery. And yes, our base case does expect recovery to resume in the summer.

Things like vaccine rollouts and the efficacy of vaccines are important to that, but also airport testing or health passports or whatever the solution is going to be will also require government to government interactions. And lastly, public confidence. People have to actually get on the aeroplanes. So yes, there's a lot of uncertainty. And, yes, the arithmetic that you – that you suggest about overall percentage of engine flying hours is there. Of course, don't forget engine flying hours – there isn't a literal connexion of engine flying hours to our cash performance this year. But, you know, there's definitely a directional relationship. And, you know, our base case does depend on that recovery. So we'll just have to wait and see and we're going to concentrate and continue to concentrate on the things that we can control and manage the things that we can't control, like timing and pace of recovery.

On XWB 900, you'll recall, 12 months or so ago, there was a huge amount of speculation about our competitive position on A350 and G having conversations with Airbus and so on. A huge amount of speculation and uncertainty in the community. And so we're delighted to put that speculation to bed for the remainder of this decade.

And you're right; the 900 variant is the volume variant. It's a hugely successful aeroplane. And technically, yes, you know, when a period of exclusivity finishes at the end of 2030, then, you know, it could be dual-sourced at the end of 2031. But as I pointed out in the presentation a moment ago, the 2030 date does coincide pretty much with the timing of, you know, likely UltraFan and next-generation aircraft and those sorts of things. It's a useful round date as well. You know, to say exclusivity to the middle of March 2031, or something like that doesn't seem like a very – it seems a spuriously accurate date. So we'll see. But for now, we're delighted with confirming the exclusive position across all the variants of the A350.

**Andrew Humphrey:** Great. Thank you.

**Operator:** We have the next questions coming from the line of Celine Fornaro from UBS. Please ask your question.

**Celine Fornaro (UBS):** Yes, good morning, gentlemen. Good morning [inaudible]. If I may, I would have two questions, please. The first one is regarding your £750 million free cash guidance for 2022. So if we try and work it backwards a little bit in terms of the businesses, we know that roughly the non-aerospace part of the business will generate approximately £700 million of cash. And then you would have £600 million of headwinds coming from the tax, the interest and the hedge book. So that would imply that aerospace basically needs to generate roughly £600 million in 2022 with a scenario of 80% flying hours. I just – you know, this is way above the 2019 level, which was in the high 400s.

Maybe you could just explain to us the path towards that. And if this logic seems accurate, based on the, you know, headwinds on aftermarket and the rebased volume offset somewhat by restructuring.

And then my second question would be, I've just seen this morning an appointment, a new appointment with effect on the board by Mr Paul Adams. So maybe you could share a few words on his background and what he would bring to – to the business given his operational focus as you are midway through a restructuring and a potential portfolio sale of some assets. Thank you.

**Stephen Daintith:** Okay, hi, Celine. It's Stephen here. So let me start with the bridge to the £750 million free cash flow as early as 2022 that you referenced.

And you're absolutely right. The key driver here will be the recovery and turnaround in civil aerospace. And if I just take you through – if I just work, let's say, from the outflow of  $\pounds 4.2$  billion that we saw in 2020 and take you through to 2022. And what are the key drivers of that material improvement in free cash flow over those two years?

So, first of all, the single biggest driver is, of course, the improvement in the engine flying hours that we see. Close to £1.2 billion of cash flow improvement. And that's essentially driven by engine flying hours rising from the 43% of 2019 levels that we saw in 2020, particularly in the final nine months of 2020, improving to the guidance that we're giving today of our expectation of around 8% of 2019 levels in 2021 – sorry in 22. And every 1%, as a rule of thumb, equals £30 million. So there's your first key item really in that bridge.

We're then also expecting to see about £900 million of improvement in civil aerospace just in market impacts. And this will be around the regional engines, the V2500 and just generally wide-body time and material improvement. That's going to be a big driver of that. We're also going to see higher spare engine volumes in 2022 than we saw in 2020, which was a pretty subdued year for spare engine demand, as you might expect. And finally, a key thing that we shouldn't forget about in civil aerospace is we're going to see around £300 million, lower Trent 1000 costs that were about £520 million this year that will reduce to around £200 million or so in 2022. So that's another key driver. [For clarification: the  $\sim$ £300m reduction related to Trent 1000 is included in the  $\sim$ £900m improvement in Civil Aerospace]

When we look at Power Systems, and ITP put those two businesses together, we're probably going to see around £200 million of improved cash flow out of those two businesses in 2022.

Another key items that we're working through, and in fact, this is an item that we've made good progress on during 2020, is our group restructuring programme. We're expecting around £500 million contribution from that compared to our 2020 numbers. Those are reductions in operating costs and capital expenditure. And just as a reminder on that, the cash mitigations of the £1 billion of savings that we've delivered in 2020 were against our pre-COVID budget, whereas the £1.3 billion of restructuring savings that we first indicated on the  $20^{th}$  May when we announced our consolidation and headcount reduction – they're measured against our 2019 cost base. So, in short, this difference means that despite the 2020 mitigations, there's still around £500 million of benefit to come across 21 and 22 and not just the headline difference of £300 million.

Another key point here is to bear in mind that we actually see a reduction in the 2020 temporary headwinds as well that we saw. And these are two key areas, really. Number one is in the fixed cost under-recoveries, particularly in civil aerospace to the drop – sharp drop in volumes that we saw in 2020 as COVID really kicked in and that we've talked about the OE volumes just now. And then we've also got a one-off FX impact in 2020 as well as our US dollar costs exceeded our revenues. And in that scenario, then we translate rather the achieved rate at the prevailing spot rates at the time, closer to 1.30 or so, rather than the 1.50 or so in the hedge book. And given that our costs exceeded our revenues in 2020, that has a material around £400 million FX headwind to 2020 that won't be repeated in 2022 as our revenues and costs get closer aligned in US dollars.

Finally, we had around £200 million increase in pension interest and tax pension cost swings in 2020 due to a deferral of the 2020 cash costs into 21. So that's another item in that expect as well. So that gets you to the £750 million as early as 2022. And I would, you know, put some qualification around that, very much dependent on the around 80% of engine flying hours that we've highlighted today and also very much dependent on the pace of our restructuring programme and the delivery of the savings as well. I think we've made very good progress during 2020. There's still much to do, particularly as we get into the discussions around the potential site implications in civil aerospace. But we're pleased with the progress that we're making and feeling confident about delivering those full savings from our restructuring programme. That's it, really on the 750. Warren?

**Warren East:** Right. Thanks, Stephen, and on Paul Adams, well, you know, we're very pleased to welcome Paul Adams to the board. I'd point out that we also highlight that three of our directors are leaving the board. They're timing out. And so, you know, this is part of the normal succession process.

Now, Paul was head of engineering at Pratt & Whitney for some years, and so he clearly has very relevant industrial experience. And, you know, that compensates for some of the industrial experience that we are losing with the timing out of those three directors. But it's also very relevant industry experience, and I think his technical background is going to be particularly useful as we go through the next decade with next-generation engines to bring on and transition to new technologies.

**Operator:** We have the next questions coming from the line of Chloé Lemarie from Exane BNP Paribas. Please ask your question.

**Chloé Lemarie (Exane BNP Paribas):** Yes, good morning, everyone. Thank you for taking my questions. I have two as well. The first one would actually be building on Celine's question on 2022 free cash flow. If we keep all things equal and adapt the missing 20% flight hours to go back to 2019 levels, I would assume you could deliver about £1 billion from civil and even possibly £1.5 once the hedge book and Trent 1000 headwinds have gone. So, could you say whether this is broadly your ambition for the division, or would there be elements that would cap that performance going forward?

And the second is on your R&D and technology roadmap. Would you see the need to return to past R&D peaks by, let's say, the middle of the decade to help fund that innovation to move towards the decarbonisation goals? Or are these technologies actually less R&D intensive than prior programmes having quite a lot of commonality with your existing portfolio? Thank you.

**Stephen Daintith:** So, thank you. I'll do the first question, Warren and I guess you'll do the second.

Warren East: Yes. Yes, that's fine.

**Stephen Daintith:** So, yes, it's a good prompt, actually. The £750 million as early as 2022 that actually includes Trent 1000 costs. We're guiding those costs in that year of between £100 million to £200 million in Trent 1000 costs, and that's pretty much the final year of material Trent 1000 cash costs.

And then – and then we've also got within that number the cash cost of closing out those FX-forward contracts in respect to 2022 as well. And that's around £300 million. So, you know, you put those two numbers together, neither of which will be permanent. The Trent 1000 costs will stop earlier than the FX cash costs. And you'll see in the appendix the timing for those total cash costs. And just as a reminder, on a profit basis, we took all of the profit impact, that £1.7 billion in underlying costs as part of our financing costs in 2020.

So the P&L impact of that has already rippled through. But the cash profile ripples through across from 2020 to 2027. So your interpretation is correct that one could see a route to free cash flows greater than £1 billion in the absence of those two headwinds. Warren?

**Warren East:** Yeah, and the question on R&D, well, I mean, clearly, we are talking about being – having an organisation that is a science-led innovation. And so, you know, we could spend almost anything on R&D. But, you know, our challenge is to make sure that we can do this in a profitable and effective way. And we've made – you know if you push COVID to one side for a moment, we've made lots of investments over recent years to enhance the productivity and efficiency of our engineering efforts. And so, yes, we remain absolutely confident that we can maintain R&D within the sort of envelope that we've now established, which is significantly less than it has been over the last several years. But don't forget two factors driving that, the improvement in efficiency and productivity, but also the fact that we're coming to the end of the investment – the big investment cycle in new engines in our civil aerospace business.

And that's why we're able to make a massive change like I showed on the slide a moment ago in terms of how much we're spending on civil aerospace, tilting the investments that we are making into the other divisions and also into the newer technologies. So you'll see the absolute level of R&D remain roughly flat. You'll see the shape change significantly.

Chloé Lemarie: Thank you very much.

**Operator:** We have the next questions coming from the line of Chris Hallam from Goldman Sachs. Please ask your question.

**Chris Hallam (Goldman Sachs):** Yeah, morning, everybody. So three quick questions. First, on slide 14, are you able to put any time frame around the £2 billion of cumulative organic free cash flow that you've highlighted after 2022? And should we assume that that's net over two and a half times dividend cover ratio? I.e. that you're paying out 40% of free cash flow in dividends over that period?

Second, back in February 2019, you withdrew from the NMA due to the tight schedules associated with the programme. If it comes, it seems like IF date for that programme has been pushed out to 2027 or so. And obviously, you've continued to make progress on UltraFan in the past two years. So is there a chance that you're interested in that programme once again? And then finally, if the UK were to significantly reduce the number of F-35s it plans to operate, would that have a meaningful impact on your defence business? Or should we think about that being driven more by the global fleet number than by the UK fleet number?

**Stephen Daintith:** So we're really talking in the midst of sort of three, four years, is the time frame that we're referencing there. I mean, clearly a lot of uncertainty ahead still. A lot of restructuring to do and a lot of engine flying hour recovery to happen. But that's a sort of rough guide on the timing. And I'm sorry, Chris, I missed the second part of the question there; I was writing down the first part of the question. So what was the second part of the question again?

Warren East: I missed that one two.

**Chris Hallam:** Yeah, sorry, so pre-crisis you used to operate on a two and a half times dividend cover ratio, right? So, you used to pay out 40% of your free cash flow in dividends. So as you try and get to net cash are you assuming within that net cash position that you would pay out around 40% of free cash flow in dividends?

**Stephen Daintith** No. That is not part of the of that modelling right now. I mean, it is something that we clearly will be considering, you know, as we get into sort of 2023, I would imagine, would be the earliest that we'll start considering the dividend coming back. I mean we clearly want to be in a world whereby we've – we've come out of COVID the other side. We're confident in our cash flow profile. We are very keen to get back to that net cash position that you just described. And we can see a route there, as I said, over the next sort of, you know, three or four years or so. And at that point, I think we'll be ready to have the debate about dividends. But right now, we're laser focused on our disposal's programme, generating the at least £2 billion from that programme and very focused on the restructuring programme and getting this business back to the sort of economics that makes sense for Rolls-Royce, that £750 million as early as 22. That's the first gauging point. And then taking it beyond there, particularly as the Trent 1000 and FX headwinds disappear as well. But I

think it's going to be around at the earliest, a 23, 24 debate around the dividend pick up again.

**Warren East:** Okay, and so your second question Chris was around UltraFan and NMA I suppose and yes, you're right. You know, we were very explicit about the reason why we withdrew from that proposed programme a couple of years ago. And that was around the timing of our UltraFan programme. Our UltraFan development has gone well since then. And we're sort of gearing up for a demonstration early – early next year. So – so then it will depend, you know, whether we go ahead with it at that stage or whether we pause at that stage, it will depend on the timing of new aircraft programmes. And, you know, the product is – or the product will be scalable. It will go across single aisle and dual aisle applications. It will be applicable for new aircraft compatible with 100% SAF and so on. So, yes, it's quite applicable. But, you know, we'll have to see if programmes actually materialise, and when they do.

On the F-35s and the UK government's cancellation, then, you know, actually, obviously, we're more geared to the whole global F-35 programme than just the UK programme. But I would also note that the UK is talking about channelling that investment into the Tempest programme, where we're obviously playing a crucial role. That's it on those questions.

**Chris Hallam:** Very clear. Thanks.

**Operator:** We have the next questions coming from the line of Andrew Gollan from Berenberg. Please ask a question.

**Andrew Gollan (Berenberg):** Oh, hi. Morning everyone. So two questions from me. One on the new volumes and one on shop visits. So on the new engine volumes, you've lowered the outlook slightly to I think 200 to 250, which is understandable, I suppose. So firstly, can you give us an update on the engine unit losses in 2020? And with that kind of lower for longer volume outlook, what's the trajectory you're expecting now for reducing that number going forward? And I guess I'm referring here to the pre-COVID target of a 0.4 billion per engine.

And then the second question on shop visits. Can you break out the volumes in 2020, as you have done before? So in terms of major refits and check and repair and what is assumed within the cash guidance over the next couple of years in particular, please?

**Warren East:** Righto, yeah, let me start on the – on OE volumes. I mean, of course, on OE volumes, we – are completely dependent on the airframe build rates. And I think in 2020, we demonstrated a certain amount of flexibility, being able to respond to that and manage our supply chain accordingly. So we will just respond to those build rates.

As far as the losses are concerned, in 2020, whilst we can respond to the build rate changes in 2020, the change was rapid. And so actually, OE losses as we came into the year at full throttle, we had no chance whatsoever of being able to respond and scale down our operation quite as fast as the volume disappeared. So lots of under-recovery in 2020. And so, in a way, the 2020 number was pretty meaningless as far as our forward-looking ambitions are concerned.

Now, for those forward-looking ambitions, however, we're – that is precisely why we are resizing our business with this restructuring. That is to deal with the anticipated OE volumes

and also the anticipated volumes of spare parts for the aftermarket. And so I think we'll be back with more news about OE loss ambitions. But, you know, hopefully we're resizing our operation accordingly to meet those lower volumes.

**Stephen Daintith:** Okay, so shop visit volumes. We actually have quite a bit of this detail already on page 12 in the first half of the release. But I'll go through it in any event. In 2020, we had 272 large engine, major shop visits, as you described in those major refurbs. In 2021, that number is going to be closer to 240. So a slightly lower level. But then it's going to start to rise – it rises then quite sharply as we're talking around 2022 to around 400 in 2022. So that's the broad trajectory of major shop visits over the course of the next couple of years compared to our 2020 levels.

**Andrew Gollan:** Okay. That's helpful. Thanks very much, and all the best, Stephen in your next challenge.

**Stephen Daintith:** Oh, thank you very much.

**Operator:** We have the next questions from the line of Ben Heelan from Bank of America. Please ask your question.

**Ben Heelan (Bank of America):** Yes, morning. Thanks for taking my question. One on retirement, because we haven't really touched on that in great detail. You do still have a relatively large exposure to four-engined aircraft, and retirements should be picking up as we go through 2021. So how do you think about the impact of retirements of 380s, 340s, 747s on that flight-hour recovery? Thank you.

**Warren East:** Yes. Well, we're not guiding specifically on retirements today. But when we look at our engine flying hour forecasts, which are what the guidance is – or what's really the driver for aftermarket revenue, then you know, we're effectively taking into account that retirement risk. I mean, we know that airlines are preferring the newer aircraft. We showed that in the presentation. And we do have exposure to some of these older aircraft. And, you know, undoubtedly airlines are going to retire the less efficient aircraft more quickly and in preference to the others. So yeah, we're taking that into account. And in fact, in – the data appendices to the presentation, then we've got the data about those older aircraft and what happened in 2020, and that's probably an indicator of what airlines are doing.

Ben Heelan: Okay, great. Thank you.

**Operator:** We have the next questions coming from the line of Robert Stallard from Vertical Research. Please ask your question.

Robert Stallard (Vertical Research): Thanks very much. Good morning.

Stephen Daintith: Morning.

**Robert Stallard:** I have a similar question to Ben, actually. Looking in the back in the appendices, roughly a quarter of your civil revenues in 2020 came from time and material and other, and that actually held in pretty well compared to long-term service agreements. So I was wondering if you could explain what was going on there. And also looking forward into 21 and beyond. How do you expect T&M to track from here?

**Warren East:** Yeah, well, no, basically we expect T&M to track with activity. The long-term service agreement, actual numbers were hit by the catch-ups. And so if you want to look at

sort of activity, then you know, look at shop visits and how those are developing and time and materials is more of a reflection of activity, whereas long-term service agreements are wrapped up in accounting as well as what's actually going on in the field. So that's the difference. And we would expect time and materials for those engines where we have time and material contracts, you know, that will just reflect flying activity as we go forward and, therefore, the recovery.

**Robert Stallard:** Can I just follow up on that because down 9% year on year would seem a very good performance given the prevailing activity we saw in 2020. So I was wondering if there were any offsets in that number.

**Warren East:** Yeah, well I think – I think 2020 we have to regard as an unusual year and that's the way I'd sort of look at it. I mean, don't forget we came into the year with a bit of a backlog of aeroplanes needing shop visits. We did take the opportunity of 2020 to burn down those queues and that also meant burning down some of the – some of the time and materials demand as well.

Robert Stallard: Okay. That makes sense. Thank you very much.

**Operator:** Next questions come from the line of Jeremy Bragg from Redburn. Please ask your question.

Jeremy Bragg (Redburn): Morning, guys.

**Stephen Daintith:** Hi, there.

**Jeremy Bragg:** I wanted to ask please again on the 750 guide for 2022. So you're achieving it despite leverage in flight hours. So I wondered if you could elaborate please on what the mitigating factors were and whether, you know, the cost-cutting is just happening a bit sooner or whether there's the potential for it to actually wind up being bigger than the 1.3. That was the first question, please.

And then the second question was on the IAE royalties, which I wondered if you could quantify them for 2020 and give a kind of view of what's baked into the 2022 guidance, because that's, again, rather like the FX, something which doesn't last forever. Thank you.

**Stephen Daintith:** Okay, so thank you for that. I'll start off with the 750. Yes, you're quite right. Back in October with the rights issue, we highlighted a 750 million number as early as 2022 but based on engine flying hours being at 90% of 2019 levels. And we're now reconfirming that 750 million. But obviously, with a lower 80% of 2019 levels.

I think the key driver of this is, we actually made really good progress in 2020 in our restructuring programme. We got further than we thought we would, and – which means that we're delivering those savings earlier than we thought. And in 2022, you know, the £1.3 billion of savings that we've quoted is the exit run rate at the end of 2022.

So clearly, we're getting that earlier. We're going to get it earlier in 2022 as well. And that's one of the key drivers. I think another aspect here is that there have been some benefits from COVID. We now have a 13-week rolling cash flow forecast by business that's given us more granularity than we've ever had, I think, into the operations of our individual businesses. We've been working hard on our budget for 21 and 22 since October with the rights issue. And that's identified, I think, some further opportunities for improvement,

particularly around our capital allocation and operating costs to help us reconfirm that £750 million, and we've got a pretty robust plan, I think, for the next couple of years now.

There are some timing items that have impacted 2021, that £2 billion cash outflow in 2021 that may benefit 2022. So there's an item there just to bear in mind as well. I think, you know, as it stands, though, we are pretty comfortable with the £750 million as early as 22, but you know, very much dependent on that around 80% of engine flying level in 2022 compared to 2019 levels.

And again, that in itself is very much dependent on the recovery in the second half of the year as Warren talked about, once the vaccination programmes globally kick in. I mean, it's become apparent, you know, talking to other countries and our customers in the aerospace sector generally, that the rollout of the vaccination programme will be a really key gating item. And I think most countries are looking for a majority of their population to have been vaccinated before, you know, global travel restrictions start to get lifted in a meaningful way. So that is probably the one key indicator for us to watch out for. Yeah, that's it.

I'll pick up the second half of the question. Just as I start on that, I'd also point out that the UK government is hosting the G7 this year. And, you know, this getting flying going again is a sort of multi-government thing that has to happen. And so our government relations team are very much spending time and effort lobbying the UK government to play a leading role in getting this risk-based approach to opening up flying again.

Now IAE royalties – IAE royalties simply a pretty good reflection of the flying hours for that V2500 engine. And so in 2020, very roughly 50% down. We expect to be recovered quite a bit in 2022. Don't forget that this is effectively a single aisle. It's a short-haul aircraft. Short-haul recovers before long haul. And so we would expect that to come back a bit more substantially than most of our activity, which is – which is wide body long haul by 2022.

But also, don't forget that you know, this royalty stream is going to disappear in 2027 anyway. So it's one to note, but it's not really the major driving factor of our business.

**Jeremy Bragg:** Thank you. A follow-on, please. What were the timing items that might 2022 – 2021 – sorry. What were the timing items that might benefit 2022, please? You mentioned that, but I wasn't really –

**Stephen Daintith:** I think the item here – and we talk about this before – is credit notes that we've issued in respect of the Trent 1000 customer disruption. I think in the main, you know, that's one of the items that we – you know, no surprise our airlines using their credit notes earlier. And, you know, we're working actually pretty well with our airlines to help them through their cash pressures to the extent that it's, you know, appropriate for us to do so and not damage ourselves. But I think it's the early use of credit notes is the one thing that I would point to that are in the 21 numbers and therefore benefit 2022.

**Jeremy Bragg:** Got you. Okay. Thank you and good luck, Stephen.

**Stephen Daintith:** Thanks very much. Bye.

**Operator:** We have the next questions coming from the line of John Stewart from JP Morgan. Please ask your question.

**John Stewart (JP Morgan):** Hi. Good morning and thank you for taking my questions. I have four, please. Firstly, and similar to Ben's question, your base case is for engine flying hour to be 80% of 2019 levels in 2022. What is your assumption on the size of the fleet in 2022 versus 2019?

And then secondly, your guidance on free cash flow is for greater than 750 million as early as 2022, which essentially has a lot of flexibility as far as guidance goes. Are you able to provide us with the minimum guide on free cash flow actually in 2022 on the current perimeter?

And thirdly, Warren, you provided some comments on your near-term margin expectations for your Power Systems business and given EBITDA [inaudible] is somewhat tied to shop visit activity and engine deliveries, two things that you have guided on and which are perhaps not as volatile as the outlook for engine flying hours in the near-term, please, can you provide us with your margin expectations in this Civil Aero business in 2021 and 2022.

And then, finally, you've injected some assets into ITP to make it more attractive to a potential buyer. Are you able to please quantify what the sales and EBITDA – what sales and EBITDA have been injected into that business, please? Thanks a lot.

**Stephen Daintith:** Yeah, right. There's quite a lot there. And I have to say I didn't hear all of it completely accurately, but let's have a go at some of them.

So the size of the fleet in 2022. Look, we're guiding – or we're not guiding, we're making assumptions about the engine flying hours that we expect in 2022. And that's the – that's a reflection of activity. It's a reflection of airline schedules and their current plans, combined with top-down forecasts. Now, in those current plans, we're not taking particular – you know; it's about airline schedules and their expectations. Exactly how many aeroplanes they're going to have servicing those routes is not something that is of particular relevance to us. And so, yes, we're taking retirements into account things like you know, A340s retiring, and you know four-engined aircraft generally retiring more than the ones that are currently –

#### [Line dropped and reconnected]

**Stephen Daintith:** So we're not giving...sorry, I'm just getting told here the line's dropped. Oh, shall I carry on? Okay, I'll carry on with my answer. We're not giving minimum 2022 free cash flow guidance, but to help you what I would say, all things being equal, engine flying hours is the key thing to watch out for here. So, 1% equals around £30 million and £750 million we've said at least 80%. So variation around that 80% number of 2019 levels; 1% equals £30 million. That's probably as best as I can give you in terms of a minimum number for 2022.

On your other questions, we're not guiding on civil profits. We haven't done previously, nor do we intend to. It's a level of detail that we're not going to go into. I think even now is less likely, more than ever, given the general uncertainty generally as we're still in the thick of COVID and we have all the recovery ahead of us to go through and the restructuring programme to go through as well. So I think that's probably going to be something to save up for this time next year. Thanks.

**Isabel Green:** Yeah, I think there may have been a small interruption on the line there, if anybody did miss part of Stephen's answer and wants to come back to investor relations

later, we can run through that again. Apologies. Back to you operator, are there any more questions on the line? If not, I've got some on the webcast:

Firstly, Nick Cunningham here from Agency Partners wanting to know more about the longer-term pattern for the major overhauls and wanting to know the impact that has as those visits start to ramp up in the later years. So if you've got any further commentary on the cash-go skyline of the overhaul scenarios that would be welcomed by Nick.

**Stephen Daintith:** Yeah, I mean – hi Nick. The shop visit volumes will start to increase. I mean, you'll have seen that from the big, you know, orders that came through over the last three, four, five years. But – so at the same time, do engine flying hours. At the same time, we see the non-appearance of the FX costs that I talked about earlier. And we also will have seen the back of the Trent 1000 costs by then as well. So, you know, despite that growing shop visit volume and therefore the cost headwind that goes with it, there are some very significant tailwinds as well ahead for us. So that's how we compensate that.

**Isabel Green:** There is one last question, and apologies for anybody who didn't get their question answered. Obviously, we will come back to you individually if you weren't able to get a response online, but a question here about SMRs for Warren, just saying, are we confident in sort of a 2030 target for SMRs given the pressures on R&D spend and how we're making those priorities. So if you have any comments you'd like to make on the SMR outlook, that would be appreciated.

**Warren East:** Yeah, and so the answer is we're – we're confident in the programme at the moment. I mean, this is very early stages at the moment. We've just had the government go ahead, and, you know, we'll fleshing out the detail on that, I think, over the next 18 months to two years. But suffice to say, we think it's a very exciting programme. Rolls-Royce has absolutely unique expertise in this area, and we see it as an essential piece of net-zero for the UK, but also excitingly, as I pointed out in the presentation, for other applications like SAF and hydrogen. So we'll flush that out over the next couple of years.

**Isabel Green:** Okay. Thank you. I'm afraid that's all we've got time for on the webcast questions. We have run out of time. Just to say, for anyone who missed that period of answers, we will make sure there is content in there in the transcript, which will be out later today or if not, maybe tomorrow on our website. Over to you, Warren.

**Warren East:** Great. Well, thank you very much, everybody. The messages that we need you to take away are that the worst is behind us as far as COVID is concerned. I'm very pleased with the progress we're making on the fundamental restructuring, particularly of our civil business, to reset the economics of our civil business and give us great operational leverage as the recovery happens. And that's going to mean that we can tilt the balance of our capital allocation going forward. So we're well-positioned for this future recovery and a net-zero world in the future. Thanks very much.

**Operator:** Ladies and gentlemen, that does conclude our conference for today. Thank you for your participation. You may now disconnect your lines. Thank you.

[END OF TRANSCRIPT]