# 2022 Half Year Results

Thursday, 4th August 2022

## Introduction

Isabel Green

*Head of Investor Relations, Rolls-Royce Holdings Plc*

### Welcoming Remarks

Hello and welcome everyone to our 2022 Half Year Results presentation. I'm Isabel Green, Head of Investor Relations. And I'm joined today by our CEO, Warren East; and our CFO, Panos Kakoullis. As usual, today's presentation will begin with a summary of our operational and financial highlights from Warren followed by a more detailed review of our financial results from Panos. And then, Warren will talk you through how we are securing a sustainable future for the business. Our presentation will take just over 30 minutes, leaving time at the end for Warren and Panos to answer your questions. Before we begin, please take note of the Safe Harbour statement on slide two. As always the full set of results materials can be downloaded from the Investor Relations section of our website. I'll now hand over to Warren.

## Performance Summary

Warren East

*Chief Executive Officer, Rolls-Royce Holdings Plc*

### Introduction

Thank you, Isabel. Good morning, everyone, and thank you for joining us today for our results presentation. I'll start with a summary of our performance. We've made good progress in the first half with growth in order intake, revenue and cash flow. And that's based on demand for our products and services, which are improving meaningfully with another period of record order intake in Power Systems, accompanied by continued recovery and Civil Aerospace engine flying hours. And we have good visibility of revenues in Defence with a strong order book.

Second point, middle of this slide, we're taking the necessary actions to protect our business from the risks of inflation, supply chain disruption and a tightening labour environment. We can see the benefits of productivity and efficiency improvements, and we expect to see more progress come alongside us being ever more disciplined on our commercial terms. And these actions taken together enable us to deliver on the commitments we've made working right across the group to deliver better performance for all of our stakeholders.

### Operational Highlights

Now let's turn to operational highlights. In Civil Aerospace shown in the top left-hand box – picture of the Dassault 10X Falcon – we've seen some great milestones in the first half of 2022. Our new Pearl 10X engine powering that plane successfully underwent its first test run, and it didn't miss a beat. And Gulfstream's G800 business jet, which is powered by our Pearl 700 engine, achieved its maiden flight. In fact, some of you may have seen it across at Farnborough a couple of weeks ago.

We've also assembled the first UltraFan large engine demonstrator, which will go on test later this year with a 100% sustainable aviation fuel. The cover picture is a picture of that engine.

And more generally for our newest engine programmes, we're continuing to invest in ways to improve time on-wing between services to maximise the value for us and for our customers. In Defence – that's top right-hand box – we have a strong order book and we've achieved our first milestone on the B-52 program. That was a critical review in support of activities for the integration of the F130 engine onto that airframe.

In Power Systems – moving to the bottom left of the slide – we're delighted to announce another period of record order intake in the second quarter. Demand has been especially strong for power generation with orders including mission-critical backup power for data centres and orders for some large customers like semiconductor companies worldwide.

Finally, in our New Markets segment – on the bottom right – we've seen great progress too. This is a picture of us signing an MOU in Farnborough in July with Hyundai Motor Group to collaborate on bringing all-electric propulsion and hydrogen fuel cell technology to the advanced air mobility market. And with Rolls-Royce SMR, as demand for power and energy independence increases, we've announced the shortlist of sites for our first SMR factory in the UK. As a reminder, this is important because we anticipate that 90% of our SMR products will be built in factories before being transported to sites for assembly. And that factory-built modular approach will drive a significant reduction in the cost of continuous zero-carbon electricity. And that's an important part of the solution for energy independence.

**Financial Summary**

*Addressing risks and driving performance*

So turning to our financial summary, free cash flows have improved by £1.1 billion, and that reflects the higher engine flying hour receipts, which are up 43% versus the first half of 2021, as well as cost control and working capital discipline. At the same time, we are facing the impact of global supply chain challenges and cost inflation, but we are actively managing these through a sharper focus on pricing, productivity and costs. And you'll hear quite a bit more on that from Panos, as we go through some examples. We are partnering with key suppliers, ensuring that we have contractual pricing protection in place through long-term contracts.

We're looking at innovative changes in our manufacturing processes to manage rising costs and supply chain bottlenecks, for example, by repairing and reusing spare parts where we can. And where necessary, we're de-risking our customer deliveries by temporarily increasing inventories.

We're also delivering on our commitments to rebuild our balance sheet in the medium term, and we've now received the required regulatory approvals for the sale of ITP Aero. And we expect that transition to complete in the coming weeks. The proceeds will be used to pay down the £2 billion UK export finance-supported loan. Our liquidity position remains strong with £7.3 billion of liquidity, including £2.8 billion in cash at the end of the period. We had net debt of just over £5 billion, including leases, and no significant debt maturities before 2024. In terms of the guidance, the Group targets for 2022, which we set out in February, are unchanged. This is despite the increasing challenges and risks around the pace of market recovery, global supply chain disruption, and, and rising inflation that we think may continue into 2023.

And with that, I'll now hand over to Panos for a deeper dive into our financials. Thank you.

## Financial Performance

Panos Kakoullis

*Chief Financial Officer, Rolls-Royce Holdings Plc*

### 2022 Half Year Underlying Results

*Underlying performance from continuing operations*

Good morning, everyone. And thank you, Warren. Despite a challenging externally environment, we've delivered materially improved cash flows versus the first half of 2021, but we still have more work to do. Now, let's just take a look at the numbers.

### Group

The results on the following slides where they're presented on an underlying basis for the continuing businesses in the Group: Group revenues, £5.3 billion. That's 4% higher than last year on an organic basis. Revenue growth was strong in Civil Aerospace and Power Systems, with lower revenues in Defence, which had a tough comparator last year. Operating profit of £125 million was below last year's £307 million, lower principally due to the absence of a foreign exchange revaluation credit in the first half of 2021 in Civil Aerospace. And that doesn't repeat this year. It was a one-off accounting adjustment of around about £270 million, about half of which unwound in the second half of 2021. And that was already factored into our full-year 2022 guidance. And as I said, it's not something we expect to repeat going forwards.

Defence profits last year, they benefited by around about £45 million from legacy spare parts sales, which again did not repeat in the first half of 2022. We reported a free cash outflow of £68 million compared with an outflow of £1.2 billion in the first half of last year. That continues our trajectory from the £4 billion outflow in 2020, the £1.5 billion outflow in 2021, and moving up towards a modest positive for the full year this year.

### Civil Aerospace

In Civil Aerospace, total engine flying hours, including business aviation and regional flights, well, they were up 33% year-on-year, showing a continued recovery in large engine business and a sustained high level of demand in business aviation. Large engine, long-term service agreement flying hours, they rose by 43% in the first half to 4.5 million – have to remember we're still in the early stages of that recovery, so that's still only around about 60% of 2019 levels. Large engine major refurbs, well, they rose by 22%, although total shop visits were only up 6%. Again, we expect further growth in the second half of 2022.

Civil Aerospace revenues grew 8% year-on-year, and that's higher shop visit activity and long-term service agreement catch-ups offset by fewer OE large engine deliveries. The catch-ups, well, they reflect strong execution and commercial discipline. That means we've got higher anticipated profitability across the life of these contracts going forward.

Civil Aerospace reported an operating loss of £79 million against a small profit last year. As I noted earlier, last year's profit included that one-off foreign exchange credit of around £270 million. Adjusting for this, catch-ups and some small favourable provision movements in the period means that Civil's underlying profitability was broadly flat year-on-year.

Civil delivered positive £63 million of trading cash flow, again a significant £1.1 billion higher than last year. With costs rebased as volumes recover, we see Civil Aerospace becoming the cash engine for the Group.

*Our commitments made at the Civil Aerospace Investor Day*

In May, we held a Civil Aerospace Investor Day in Derby. If you didn't attend, I'd really encourage you to watch it on our investor relations website. We set out five key value drivers for the business: one, maximise service receipts; two, reduce service costs; three, improve OE margins; four, grow business aviation; and five, make sure we benefit from a favourable point in the investment cycle as we exit what has been a period of intense product development. And we're going to be reporting on these drivers on a consistent basis going forwards.

As part of that day, we also set out medium-term financial targets based on engine flying hours recovering to 2019 levels by around 2024. Within those targets, we expect a low double-digit compound annual growth rate in total revenues based on 2021 as the start year, a high single-digit operating margin and trading cash flow to comfortably exceed operating profit. We remain confident in our ability to deliver these targets and in the operating leverage of the business, as our revenues grow.

**Defence**

Our Defence business, well, that's a long cycle business, and it doesn't immediately benefit from the big geopolitical changes we're seeing at the moment in the wider world. However, rising budgets in most Western countries do underpin our confidence in the long-term outlook for this business and its annuity-like cash flows.

We've recently won some very important contracts like Warren referred to, the B-52, and there are other contracts we're bidding for, such as the future long-range assault aircraft for the US army to reflect – replace its fleet of Blackhawk helicopters. And we are expecting a decision on that in the coming months.

Underlying Defence revenues, £1.6 billion, they were 9% lower than in the first half of last year. And operating profit was £189 million that gives you an 11.7% margin. As I noted earlier, the first half of 2021 included an unusually high level of legacy spare engine sales, which added roughly £45 million to profit. Trading cash flow, £89 million, was equal to last year.

**Power Systems**

In Power Systems, we've seen very strong demand, 53% growth in order intake in the period and a book-to-bill ratio of 1.5x with a record quarter for orders in Q2. Order cover is already at 100% for the rest of 2022. And in fact, in some of our end markets for 2023, we are close to full capacity already.

Revenues in the period grew by 20% year-on-year, and that's despite some challenges around Ukraine and the supply chain that Warren referenced. Underlying operating profit, that was £119 million, giving an 8.7% margin against 3.5% in the prior period. Trading cash was an outflow of £76 million compared with an inflow of £71 million in the prior period. Now, that partly reflects some working capital investment to support the currently very high levels of revenue growth. We've also got some issues in the supply chain there, and that's resulted in inventory build, which we are working very hard on to make sure we reduce in the second half.

**New Markets**

*Leveraging synergies across the Group*

Finally, let's look at New Markets. That includes the SMR and Electrical businesses. New Markets reported an operating loss of £48 million in the first half of 2022. And that as you'd expect, reflects the ramp-up in R&D costs as we grow our teams. We've got just under £0.5 billion of committed funds in place to cover the R&D costs for our SMRs over the next five years, and only 10% of that is the amount we will fund ourselves. The investments that we're making in this segment have a broader synergistic benefit across the whole Group, and Warren's going to touch on that later.

**Summary Funds Flow**

*£68 million free cash outflow in 2022 H1*

This next slide, that sets out our Group cash flows, starts at underlying operating profit. Our free cash outflow was £68 million in the first half. That compares with an outflow in the prior period of £1.2 billion. Our stronger cash flow performance year-to-date gives us confidence in our ability to deliver modestly positive free cash flow for the full year.

That £1.1 billion cash flow swing can be broken down into three broad buckets. Firstly, we saw an operating profit performance improvement of around about £490 million, and that largely reflects the growth in large engine flying hours in Civil Aerospace. Secondly, working capital, that was £350 million better, as inventory build was partly offset by strong customer collections in period, particularly in Civil Aerospace, and improved performance on payables. And thirdly, other impacts were £230 million better than the prior period with a lower pension contribution and derivative settlement costs and higher profits coming through from discontinued operations, offsetting higher interest costs.

We saw limited impact in the period from concession payments. We started the year with around about £300 million of net concessions slipped from 2021. Now, at that time, we thought those would largely unwind in 2022. Since then, we've seen those further delays in 787 deliveries and the associated concession payments. Important to note though, that's largely offset by a reduction in concession receipts on new Trent 1000 deliveries, as Boeing itself manages its own inventory. So as a result, concession outflows are expected to be slightly lower than we originally anticipated, but there is a larger headwind coming in 2023, as those gross slips are compounded in 2023, by continued low receipts from Trent 1000 new engine deliveries.

**Reaffirming Our Financial Priorities**

Now, when I started this role, I set out three clear priorities for the business: deliver on our commitments, simplify how we report and invest wisely over the future. I just want to give you some examples of our progress in each of those areas.

*Deliver on our commitments*

So firstly, delivering on our commitments. We all know how challenging and uncertain the external environment is, given the war in Ukraine, the impact on supply chain, rising inflation, fears of recession and continued intermittent lockdowns in China. Nevertheless, we stay committed to delivering on what we have promised. I want to share with you some of the ways in which we're actively managing the current situation.

Firstly, through commercial discipline and on pricing and also on contract management, in Civil Aerospace, we've been able to contractually pass on higher input prices on both OE and aftermarket through indexation clauses. In Power Systems that's a shorter cycle business, we've also been able to raise prices in an environment where demand is very strong and margins are very closely leveraged to volumes. And in Defence, we're working hard to manage supply chain costs through long-term purchasing agreements and focusing on pricing with customers.

Secondly, we are focused on controlling our cost base to ensure that there is operating leverage as revenues grow. We focus down our supplier lists seeking to work with the very best performing suppliers. And in most cases, we have long-term agreements in place which offer us good protection for near-term price pressures. A case in point, titanium: we've already secured a long-term agreement with a US-based titanium supplier, which means that we continue to be increasingly less reliant on titanium from Russia. Another example on the Pearl 10X, where innovative digital sourcing approach has allowed us to achieve a 10% cost reduction on parts by consolidating our spend with four high-performing suppliers. And more broadly, in Civil Aerospace, we've taken proactive steps to further strengthen our focus on supply management in the first half. That included very careful, selective hiring to support and manage the supply chain. We've established tiger teams in those severely stressed parts of the supply chain, including the use of external specialists.

On the commodity side, we've also have hedging in place to protect us from near-term volatility. An example would be nickel. We're currently hedged 75% for 2022 with significant levels of hedging in place for the next four years. Jet fuel, we're 80% hedged in 2022 with a ramp down out to 2025. Now, finally, working capital remains a key focus and in particular customer collections and driving down inventories.

*Simplify how we report*

Next up, simplify how we report. An example of how we are driving simplicity across the business is our new approach to foreign exchange hedging, which is more cost-effective, brings us into line with our peers to allow comparability and allows us to more proactively manage risks.

Historically, we've hedged a declining percentage of our foreign exchange exposure across a rolling ten-year horizon, and that was based on our projected US dollar revenues. Now, the issue that gave us going into COVID was we were carrying a very large hedge book, much larger than our peers. And because of the material impact COVID had on our medium-term forecast of US dollar revenues, we found ourselves over-hedged. You're all aware there was a £1.7 billion cost to unwinding these hedges that we charged in 2020, that we feel the cash flow impact of until 2026. And it's worth remembering every $1 cent movement in the hedge rate impacts our operating profit and cash flows by around about £25–30 million.

Under our new approach, we're going to be carrying a smaller hedge book with a declining percentage of cover over a five-year period, which will mean that market movements in foreign exchange will impact us sooner. The chart on the slide – that shows our current hedging position. We've got some flexibility to move these hedges around, but we are largely hedged at $1.50 to the pound until 2026. From then, you will start seeing the benefits coming through from the new hedging approach.

*Invest wisely for the future*

And my third priority, making sure we invest wisely. We've got strict criteria that we follow when considering new investments. Firstly, they need to be aligned with the Group strategy and focus on sustainability. Warren's going to pick up on that theme shortly. 75% of our R&D investment in the medium-term will be on lower carbon technologies and making our existing products compatible with net zero. We also continue to invest in improving the profitability of our products by increasing time on-wing efficiency and productivity. Now, whilst we're seeing in increasing investment in new markets, our established businesses are critical too. Around 80% of our CAPEX and R&D this year will be focused on Civil, Power Systems and Defence.

Next, we very carefully consider the risk-reward profile of each investment based on an estimate of its IRR in a range of scenarios. Our investments, we aim that they generate a combination of near-, medium-term and longer-term returns. That gives us a balance of protecting and growing our established businesses and pursuing longer-term growth opportunities at the same time. Now, an example of an investment that will generate a return in the near term is the work we've done on extending the time on-wing in the Trent 700 engine. At the other end of the spectrum are our investments in electrolysers in the SMRs. Now, for these more longer-dated investments, we make sure that we have a sufficiently high IRR on a risk-adjusted basis. Just to give you an idea from a process perspective, all investments over £5 million are reviewed by our group investment review committee. That meets monthly. I've chaired all of those meetings since I started with the business. We set a very high bar when considering new investments and there are many examples of projects that didn't make the grade. And we continue to focus on in-flight reviews of investments to make sure we improve the accountability and delivery on existing projects.

And I'm going to keep coming back to these three themes in the future. So delivering on our commitments, simplify how we report and making sure we invest wisely.

**FY 2022 Outlook and Guidance**

Now, my final slide. Despite the challenges around inflation and the supply chain, we are confident in our ability to deliver on our commitments. At the Group level, we still expect to deliver low- to mid-single-digit revenue growth, a broadly unchanged operating margin year-on-year and modestly positive free cash flow. Now that guidance is based on expected improvements in Civil Aerospace driven by higher large engine sales and also increases in shop visits.

Our divisional guidance has changed slightly. In Civil Aerospace, we now expect to deliver good revenue growth in 2022. In Defence, we're now guiding for a low double-digit operating margin in the full year for 2022. That's lower year-on-year due to higher investment spend and also the non-repeat of those legacy spare part sales I mentioned earlier. Now, lastly, just to help the modelling, a word on tax. We're still expecting Group cash tax payments to be broadly similar to the £185 million paid in 2021. Now, we expect the P&L charge to be lower than this, but due to the geographical mix of our profits and losses, we will see a higher than normal P&L tax rate this year and in 2023. And with that, I'll hand back to Warren.

# Securing a Sustainable Future

Warren East

*Chief Executive Officer, Rolls-Royce Holdings Plc*

## Progressing Towards a Better Future

*Looking ahead*

Good. Thank you, Panos. Now, securing a sustainable future. When we talk about sustainability, of course we mean in terms of the energy transition and addressing climate change, but we also mean ensuring business sustainability with disciplined investment for sustainable returns. But before I talk about the future, I'd also like to touch upon last week's announcement regarding the new CEO appointment and a few personal reflections.

It's been a great privilege to have been entrusted with the stewardship of this company over the last several years, and I've enjoyed support from loads of people. I especially want to thank the amazing people at Rolls-Royce who make it all happen in spite of some really challenging events and indeed all the changes that I have thrust upon them. We've dealt with some major challenges in that period, and I'm pleased to reflect on how much the company has changed in that time.

Indeed, the appetite for further change that we've developed, Rolls-Royce is now much leaner, more agile and more focused than it's ever been. We've taken significant costs out and developed a more cost-conscious culture across the whole organisation, but we've not lost the focus on excellence nor our ingenuity, which enables us to punch well above our weight. We've developed more efficient, durable, and sustainable products and services that will serve our customers for decades to come. And in addition, we've embarked on a net zero pivot. As you know, in my book, disruption like this spells opportunity, so I'm more optimistic than ever about the future. I'm also proud of our broader leadership team, which like our people at large is, on average, younger, much more diverse and much more agile. That gives me the confidence to pass the baton to Tufan, who joins us in January. Together, they will create that sustainable future for Rolls-Royce.

## Transitioning to Net Zero

*A Group focused on power*

Now, on a sustainable future. The number one thing is to make the Group sustainable as a business. Key to this is leveraging the asset, which is our installed base. The largest earnings potential lies in our large engines, powering the world's youngest wide-body airline fleet, where we power the majority of aircraft types available for airlines to buy today. Alongside this, we have over 9,000 business jet engines and more than 16,000 Defence engines, as well as over 40,000 customers for our power systems products. And as we outlined at our Civil Investor Day in Derby, recently, we work intensely to increase the profitability of our installed base. And that's the asset with significant barriers to entry that drives our sustainability from a business point of view.

Now, I want to shine a light on the technology behind the business opportunity in the other sense of the word sustainability. We're a business that's focused on power. More accurately, perhaps, turning stored energy into useful power in particularly difficult applications. This offers challenges, but it also creates excellent barriers to entry, once you've developed that domain expertise. Now you hear today about alternative forms of stored energy and it can all sound very complex, but, actually, this is a continuation of our long journey.

For much of the time since, say, 1940, we've worked with two forms of stored energy – fossil hydrocarbons and nuclear power. Looking forward, sticking essentially with the same difficult applications where we draw on our decades of expertise and those barriers to entry are mentioned, we move from two forms of stored energy to four. If we look at the hydrocarbon stream, we anticipate that over the next 20 years, we will see a switch to synthetic fuels. It will remain prevalent for decades in our reciprocating engines, but in particular, it's going to be relevant for our gas turbines for long-haul aviation. We're ensuring that our gas turbines are ready now for that transition.

Looking to nuclear – moving up the slide – we have multi decades of experience in providing safe nuclear power in a really challenging application. And that gives us the confidence in our capability to deliver our SMR solution. The huge reduction in the cost of continuous zero-carbon electricity that our SMRs provide makes us firm believers, that it is the right solution to decarbonize the grid and to enable standalone industrial applications such as producing the synthetic fuels and – at the top of the slide – the hydrogen. There are even future opportunities in space applications with microreactors.

Now, electrification is an established trend with progress in battery technology. And for us initially, this means using battery storage for hybrid propulsion microgrid solutions on land. However, this is rapidly becoming relevant in aviation. With several contracts in urban air mobility, in commuter aircraft for full electric power and propulsion. And these sub-sectors will produce revenue and profit relatively soon. We can see full electric and hybrid and more electric solutions moving from smaller aircraft to larger ones as the technology matures. Now in order to achieve true net zero, we will, I'm sure be deploying hydrogen-based power and propulsion solutions in time, even to our wide-body customers in long-haul aviation. And I'll show how we prioritize and invest into those alternative forms of energy storage using hydrogen as an example if we move to the next slide.

**Generating Returns from Net Zero Transition**

*Hydrogen – technology pathway*

Let's just look at the hydrogen pathway. We can deploy hydrogen in a reciprocating engine and a gas turbine with hydrogen fuel cells in between. The grey areas on the slide represent the investment periods and the green areas show when we can make revenue and earn profit.

Our hydrogen is gaining relevance in many markets and our customers look to us to help them decarbonise. And some of these are a way off, but we need to be ready with the technology as that technology and infrastructure matures. And you can see that whilst we must be active and present, hydrogen and the gas turbine together for wide-body aviation is a minimal investment today. And based on what we can see, revenue is not likely before the late 2030s, but we are investing now where we see short-term potential for deployment and business return – at the top of the slide – for example, around reciprocating engines and – coming down the slide – in fuel cells, moving from land-based stationary to mobile and later into the air.

There are opportunities too for inorganic growth; for instance, the recent acquisition of the electrolyser specialist, Hoeller, will help us to move to market quicker in power systems, alongside disciplined, prudent investment. In some cases, the best approach, though, is to form partnerships. At Farnborough, the partnership that we announced with Hyundai that I mentioned earlier includes hydrogen fuel cells, and we also announced there a partnership with EasyJet and that's all about hydrogen in gas turbines. Now, these investments and partnerships are creating knowledge, skills and capabilities that flow across our Group, creating benefits and applications between our different businesses.

**Recognising and Retaining Talent**

*Our people*

It isn't just about the technology, it's about the people. You've heard me say many times before that our key differentiator is our people, so I'm pleased we continue to be a company where talented individuals are keen to work. Since 2021, we've seen an increase of 48% in applications for our Early Careers, and 58% of the graduate hires in 2022 are female and 36% from ethnic minority backgrounds.

In addition to hiring though, it's even more important that we create an environment where all our people can deliver to their full potential, and that means being really inclusive. We support over 20 Employee Resource Groups across all diversity strands including faith, ethnicity and gender networks. The largest one of those is Prism, which supports our lesbian, gay, bisexual and transgender community here in the UK, and we're proud that this network has received multiple externally recognised awards.

We can see how inclusion, coupled with the right incentivisation, encourages the right business outcomes. For instance, looking at our patent award scheme, in 2022 nearly half of the new inventions filed related to our net zero ambitions. We've introduced a new approach to learning, and this includes a refreshed, digitally enabled approach for all of our people to get learning out really quickly. One key aspect of this is a digital internal marketplace for so-called 'gigs.' These are bite-size pieces of work that are matched on the basis of capability to people anywhere across the organisation, leading to much more agile working and ensuring that we develop a capability, irrespective of any internal organisational boundaries. And that's especially crucial for highly sought-after fields like electrical engineering.

**Performance Summary**

*Focused on operational and commercial drivers to address risks and improve performance*

So let's conclude: a reminder of what we have covered. We've progressed well in the first half of the year, with substantially better cash flow as we manage our costs and the markets recover. It's a tough environment though, and we're addressing this with a focus on the operational and commercial actions that can protect our performance, and we're sticking to our commitments. The disposal of ITP has been approved and it will complete in the coming weeks, and we're well-positioned to achieve our guidance. I'm convinced that with the best people and breakthrough technologies for the energy transition, and a more modern and much leaner business, we have a bright and exciting future ahead.

And, with that, I'd now like to hand over to the moderator to open the meeting to Q&A.

## Q&A

**Operator:** Thank you. As a reminder, to ask a question you will need to press star one on your telephone and wait for your name to be announced. We will first start with webcast questions while we compile the Q&A queue. Back to you, Isabel.

**Isabel Green:** Thank you. And so a question here from the webcast to Warren, actually. So, Warren, your results today have got quite a lot of noise and you say you're progressing well, but I can't see it coming through in the numbers. Can you tell me a bit more about what's going on in the business?

**Warren East:** Yes. I say we're progressing well because, you know, we can see growth. We can see growth coming through in revenues, we can see growth in orders. Our Power Systems businesses just had a record quarter for orders, and actually the first quarter was very strong for orders as well, so we now have a record order book there. And I can see a massive swing in the cash flow. A reminder of the trajectory, you know: COVID, minus 4.2; last year, minus 1.5. This year we said we'd be modestly cash positive, and the first half has set us up very well for that, being, you know, just a £68 million outflow. And what's really driving that is a recovery in engine flying hours, in our Aerospace business as well; you know, large engine flying hours up 43%. And so, you know, I think that's the indications of progress.

Now, when you look at our profit and just compare first half this year to first half last year, then, you know, I think that's what's caused a little bit of noise this morning. I think it's important that we understand the moving parts behind that, so I'm going to ask Panos to explain that one.

**Panos Kakoullis:** And I think you're right. At first blush, when you look period-on-period at what's happened to operating profit, and I called it out in the presentation, £125 million versus £307 million, it does look… and what we've tried to do is try to be helpful, to pick out what's really going on behind that, and particularly when we're in the environment we are now of going through a breakeven. Yet, relatively small numbers either way can have a distorting effect, so what we've tried to do is pick out things that are, effectively, one-off and we've tried to do that in a balanced way. So, you'll see that there is a non-repeat of a revaluation credit. There was a foreign exchange revaluation credit of around about £270 million in last year's numbers due to the change in foreign exchange rates. There was also a £45 million benefit from the legacy spare parts sales within the Defence business last year – didn't repeat this year. Again, that's consistent with what we expected.

Year-on-year, we're benefitting from more positive catch-ups this year than last year, and you can see a benefit of around about £50 million coming through from that. And also this year, we've got a one-off write-off on a legacy contract from a business that we sold of just under £30 million.

So, when you strip all of those elements out and say, right, what is going on with the underlying business, you end up with an operating profit a little bit up year-on-year. Again, it's sort of indicative of the underlying progress.

**Warren East:** Yeah, thanks.

**Operator:** Now we're going to start to take questions from audio lines, please stand by. And the first question comes from the line of Robert Stallard, Vertical Research Partners. Your line is open, please ask your question.

**Robert Stallard (Vertical Research Partners):** Thanks very much. Good morning. Hello?

**Warren East:** Hello. We can hear –

**Robert Stallard:** Can you hear me?

**Panos Kakoullis:** We can hear you.

**Warren East:** We can hear you.

**Robert Stallard:** Okay.

**Warren East:** Yeah.

**Robert Stallard:** A couple of questions from me. First of all, Warren, you mentioned the – that you're enforcing indexation in your contracts and that the Power division is seeing good pricing. Is this enough to cover the cost inflation that you're seeing coming through the system, and is there a bit of a timing mismatch here that you're getting the price benefit before the cost impact?

And then, secondly, Panos, my phone was giving me grief when you were talking about the 787 payments and how that's going to flow out. I was wondering if you could clarify what you'd said? Thank you.

**Warren East:** Yeah. I understand your point, Robert, about price before cost and we're very, very tuned in to that. Now, the first thing to do is, of course, pass on as much of the inflationary pressure as you can from a contractual perspective, and then you have to look to your costs and think about how we can control those costs, which we're absolutely doing. And, you know, part of that is softening the blow of the inflationary pressures by things like hedging, things like long-term supply agreements with our suppliers, focusing on the smaller number of suppliers so that we can actually strike better agreements. You know, some of these supply agreements fortunately, you know, do stretch out for a very long period of time, and so we consider that we're well-protected. You know, there is a balance to be struck between the pressure that you're getting from costs going up and, you know, how much you're able to pass on. And when I talk about commercial discipline, I mean tilting the balance of that so that it is largely within our favour.

**Panos Kakoullis:** Yeah. I guess the bits that I'd add to it, and you can look at the three businesses in different ways, so the Civil Aerospace business, we are – and I think you talked about enforcing indexation – we are being robust around how we do that. You can see a little bit of the benefit coming through, the future benefit, effectively, coming through, from the catch-ups, and a lot of those catch-ups are driven by the expectations through that enforcement. From a cash perspective, it actually comes a little bit – it has a little bit of a lag because it, sort of, catches up year-on-year.

On the Defence side, it tends to be through contract renewals, which happen regularly, so, again, a little bit of a lag there. Within Power Systems, when you have got record demand and a very strong order book you can be much more regular around price increases, and, as Warren has said, the other element is you control costs. So we were – we have been clear around focusing down on the critical suppliers, the ones that are the best-performing supplier. And to be a best-performing supplier, it's not just about cost; it's about being able to deliver to the highest quality as well. And you'll have heard in the – maybe in the presentation, we talk about digital sourcing on the Pearl 10X. That's a fancy way of saying we had a supplier conference and 10% reduction in pricing going forward, and that gets locked in with very low levels of indexation. And then that, together, as Warren has said, with hedging around commodities, puts us in good shape around that.

On the 787 payments coming into the year, we talked last year about that £300 million slip, from 2021 into 2022, on concession payments we expected to go out. Those haven't happened yet. They look like they might slip into the following year. It doesn't actually have as big a benefit, in terms of lower outflow happening this year, as you would have anticipated, because Boeing themselves are managing their own inventory. So new concession receipts are lower than we expected, so the net-net impact is not big this year. It does, though, create a little bit of a headwind for next year as some of those slip into next year, those payments, without necessarily having new orders coming in and that would generate new concession receipts.

**Robert Stallard:** That's great, thank you.

**Warren East:** Thank you.

**Operator:** Thank you, Robert. Now we're going to take our next question, please stand by. The next question comes from the line of David Perry from J.P. Morgan. Your line is open, please ask your question.

**David Perry (J.P. Morgan):** Yes. Good morning, gents. Can you hear me okay?

**Panos Kakoullis:** Yeah.

**Warren East:** Yes, we can.

**David Perry:** Okay, great. I've got four questions; I don't know if that's too greedy. They're quite short. The first one, the Defence guidance of low double-digit margin I just wanted to clarify. I mean are we thinking 10 to 12? And then is that a baseline going forward, because Defence margins historically have been hard to forecast?

The second one is the finance charge was a lot higher than I expected in H1. I just wondered if you can help us think about the full year and maybe even going forward, because obviously you've got ITP proceeds and you're going to pay off some debt.

Tax charge, clearly very high: will the second half be the same as the first half?

And then the last one, please, the fourth one. The LTSA inflow, £433 million in H1, I think at the CMD you talked about £500-ish million a year. So is it still £500 million for this year, or is it going to be meaningfully higher than that? Thank you very much.

**Panos Kakoullis:** Shall I pick them up?

**Warren East:** Yeah.

**Panos Kakoullis:** Thanks David. I will –

**Warren East:** You start.

**Panos Kakoullis:** I'll try and keep them – as you said, quite short ones; I'll try and keep them short and sweet. I think on Defence, it's consistent with where we were expecting this year to be. We wanted to be more explicit about that guidance as we went through the – into the second half, just to make – to be as helpful as possible around that. Last year we did have a little bit of the number being flattered by those legacy spare engine sales, so that's why you see that coming down. It is now representative, I would say, of the mix going forward, so some of the older work was a little bit of a higher margin. And we got the impact coming through of the single source regulations as well. So you can think of it as that sort of level going forward. And the range you talked about is a sort of sensible range to be thinking about, maybe a little bit towards the higher end of that 10 to – the 10 to 12.

On finance charges, in terms of the actual P&L charge this year, there's a little bit of extra this year, because last year the UKEF loan, the £2 billion we took out sort of midway through the first half, so you've got the 'anniversary-ing' effect of that for a full six-month period. But think of that as being – as, sort of, the charge going forward, adjusted for ITP proceeds. So, as we said in the release, ITP proceeds, we're going to use to pay down the £2 billion UK Export Finance loan. And that's our only floating interest rate loan; all the other loans are at fixed rate. So that will give you an idea, though.

On tax, the tax charge does look unusual because we've got two territories, the US and Germany, where we are tax-paying. In the UK, we make taxable losses and we've got a lot of loss to use going forward, so there's no actual charge that comes through from that. So you do get a slightly odd looking number because you've got two tax-paying jurisdictions, and the largest one isn't. From a cash perspective, think of last year and this year being broadly the same.

On – in terms of the LTSA, you're right. Back at the – back in Derby on 13th May, we sort of talked about in the medium term being around about a £500 million number on the LTSAs. It is going be meaningfully more than that this year. You quoted the £433 million for the first half of this year. It's going to be, again, meaningfully more than that as those engine-flying hour receipts come through. The relationship of that, with actual shop visits happening and some of that LTSA creditor effectively ending up being – taking through revenue. That's one of the sort of judgments that we have to take, but it will be meaningfully more than the £500 million this year.

**David Perry:** And just a follow-up on that. The £500 million a year then, do we – is that an average? If it's much better this year, is it lower in the future years or is it just this year's a one-off and it's still the £500 million a year going forward?

**Panos Kakoullis:** So I think we said £500 million by the medium term, so then over the next few years. It is going to be higher levels than that, depending on the trajectory of the engine-flying hour receipts and the level of shop visits going forward.

**Warren East:** Yeah. I mean I think an elevated rate in the short term is a logical consequence of the sector is recovering from COVID. Flying is starting to happen and the shop visits are going to follow. I mean, don't forget, we've got a load of shop visits that, you know, pre-COVID would have happened over the last year or so that have, effectively, been delayed, and that's what's causing the LTSA increment to be at a higher rate right now.

**David Perry:** Very clear. Thank you very much.

**Operator:** Now we're going to take our next question. And the question comes from the line of George Zhao from Bernstein. Your line is open, please ask your question.

**George Zhao (Bernstein):** Hi guys, good morning everyone.

**Warren East:** Good morning.

**George Zhao:** My first question is, you know, how do you assess the health of the – your supply chain, you know, as you and the OEMs consider potential, you know, wide-body production ramp-up? You know, we're seeing a lot of supply constraint on the narrow-body side of engines right now, and, you know, while, clearly, the wide bodies, they're not facing the same level of ramp-up as the narrow bodies. You know, are there risks that some of your suppliers that are involved in, you know, the different programmes could face some challenges in ramping up?

And, secondly, you know, I wanted to understand a bit more about the price indexation on the LTSAs. You know, we've heard some of your other peers comment that they're more preserved against inflation on the time and material versus the long-term agreement. So, you know, how do you contrast your work here? You know, is there more of a cap within the LTSAs where – you know, for which you can pass on the cost inflation that might be, you know, less favourable than the time and material agreement? Thanks.

**Warren East:** Shall I take the first one and…?

**Panos Kakoullis:** Yeah.

**Warren East:** Yeah? So, you know, I think the key difference between narrow body and wide body is obviously the absolute volumes, and that's why, you know, the situation is very intense in the single-aisle space at the moment, because, you know, everybody didn't quite come to a grinding halt, but everybody suddenly went very, very slow. And now they're being pressured to ramp-up very steeply, but the numbers are all large. Obviously, as you pointed out, wide body is a slower recovery, which gives us all some breathing space, but also the absolute numbers are much, much smaller. Now, we talked about – and Panos cited a supply-chain conference a moment ago in an answer to an earlier question. And, you know, that's the sort of engagement that we are having with suppliers. Basically, we are spending more with fewer suppliers. The relationship with those suppliers is richer. The contract terms can be longer and more rigorous. And, so, you know, those are the steps that we're taking. Obviously, there's real-world risks that all of these suppliers face, but, you know, by close working relationship with those suppliers, and we've hired people. We are hiring people specifically to manage suppliers at the moment. And we also have task forces from within our business working with suppliers. And I think those measures taken together put us in reasonable shape and, you know, we do anticipate the wide body volumes recovering not sort of immediately, so we do have some time for this, but, you know, we can see them recovering. I've been quite vocal in the media about commercial discussions, you know, taking – ramping up, and that is going to result in new OE demand over the coming years, but we think we're pretty well positioned for it. LTSA price escalations and the like, if you take – take one or…?

**Panos Kakoullis:** Like I said, I don't – just a couple of sort of points or detail around the management and the supply chain. It's procurement specialists, and we've hired around about 70 extra people – specialists in that area. And as you – those of you with the Civil day back in Derby, will remember Sebastian Resch, our Operations Director, he always talked about it's about boots on the ground, it's about spending time with the suppliers to make sure that we're in the right place in the queue, and we understand day to day and we manage day to day what's going on around that supply chain.

On the indexation point, I think you asked if, you know, is there a limit, is there a ceiling; effectively, is there a cap? Actually, there's a collar. So, first few percentage points we, we can pass on directly, then there's a collar of a couple of percentage points. And then beyond that, what's called hyperinflation from a contract terminology perspective, we can pass that on again. But each contract will be negotiated on its own terms, but that's the broad – the broad shape.

**Warren East:** Thank you.

**George Zhao:** Thank you.

**Operator:** Thank you.

**Isabel Green:** Hello, it's Isabel again. I've got a question from the webcast. Chloe Lemarie from Jeffries has written her question in, so I'd like to read two questions out from her, please, if I may. Firstly, stripping out all the one-offs in Civil, it appears there was a $100 million year-on-year increase in operating profits for the division. Can you provide some colour on what drove this between OE and aftermarket, or between large engines and others?

And the second question from Chloe, please, can you detail what drove the catch-up recorded in Civil this half? Additionally, how are you seeing the Trent XWB aftermarket trending in terms of operating performance?

**Panos Kakoullis:** Okay. You can pick up XWB and…

Warren East: Yeah. Yeah, you go.

**Panos Kakoullis:** So, just in terms of stripping out the one-offs, when I gave the response earlier on, I was looking at the one-offs across the whole Group. The one-offs that specifically apply to the Civil business are the £270 million foreign exchange credit from last year – it doesn't repeat, so strip that out; the net year-on-year benefit of the catch-ups, which is just around – just over £50 million; and then we had a little bit of provision release this year versus last year, which gave us a benefit. Actually, when you strip those out, you end up with civil in the first half being broadly flat. So, it's – I don't think it's the $100 million you talked about; it is broadly flat. If you unpick that to say, right, what is behind that from both an OE and services perspective? OE, we are broadly flat. You can see the sort of installed deliveries first half this year versus first half last year; it's broadly flat. The mix is actually more in favour of business aviation than wide body, so that gives us a little bit of a margin uptick. Services, on the other hand, you can see quite a – you know, I think about a 22% from memory increase around services, but that's more – that's on the wide body; and 6% overall on all shop visits. The mix goes the other way a little bit on that one, so that's – you look at those underlying – two underlying operating drivers, and that will get you to the broadly flat once you strip out those one-offs.

In terms of what happens going forward and what underpins our view around the outlook for the full year, there is a significant ramp up in shop visits in the second half, which generates a significant amount of profit, and a number of spare engine sales. We'd originally thought there'd be a few more spare engine sales in the first half, but those have now moved into the second half. And that's a combination of – as I mentioned, of spare engine sales to customers and also to third parties that operate a pool.

In terms of what drove the catch-ups, a lot of that catch-up is around pricing. And it's around that pricing, that commercial discipline, that we've been talking about, particularly around business aviation, as those indexation clauses effectively come into effect and mean that we've got greater profitability on those contracts going forward. And I know I've stressed it a few times around the importance of looking at catch-ups and what they're telling you, because they are saying that over the life of those contracts, if it's a positive catch up over the life of those contracts, we expect those to be more profitable going forward and there is a catch-up now, when we look at how much we've traded in the past. It works both ways, so we need to be balanced around that. So within Defence, you'll see there's a £22 million charge in defence around some risks on inflation. XWB performance?

**Warren East:** Yes, XWB performance. I'm actually not quite sure whether you mean how the shop visits are going, or how the engines are performing and therefore needing shop visits, but let me have a go. We continue to be pleased with XWB. The actual sort of in-service performance of the engine is excellent, and we get great feedback from our customers. We are – have been gradually pushing out the service interval on the 84Ks through a process of inspections, because obviously we don't want to do a shop visit until we absolutely have to. And that's been encouraging, and we've spoken about that before. And then those who came to Derby, I think, saw lots of activity aimed at systematically extending the service interval. And, you know, we expect that to continue on both the 84K and the 97K over the coming years. If that's what you meant by performance and shop visits, then that's the story.

**Isabel Green:** Thank you. I've got two more questions. They're quite short, so I'm going to ask them both one after the other. The first one from Exor, a very short question: where do you expect working capital to come out for the year?

And then secondly from Spinecap: Could you give us a bit more detail on what changed on the FX hedging and how much net US dollar exposure you expect to have by ’24/’25?

**Warren East:** I – are you going to do both of these?

**Panos Kakoullis:** Yeah, I can pick that up. In terms of working capital for the full year, you'd expect to see a sort of slightly negative working capital. That unwind of inventories is going to be a little bit more than – from where we are now, is going to be a little bit more than offset by the increase in the performance on payables, so expected to be a sort of slight negative for the full year.

In terms of the FX hedging, current book, I think, is around about $21 billion in terms of exposures going forward. As I, as I said in the presentation, the aim of the new policy is to make life a little bit simpler for everyone in comparing us with others; also allows us to be more proactive in how we manage that risk as well. So, you’ll see a policy going forward of a declining cover over a five-year period. For that to fully be in effect, it's going to take a few years, because we've got a hedge book at the moment that's a – I guess, the past policy means we're 100% hedged for the next five years. And it's as that unwinds and we put the new policy in place, you'll see that slight coming down over time.

**Warren East:** Thank you. So, back – back to live?

**Operator:** Thank you very much. The next question comes from the line of Olivia Charley from Goldman Sachs. Your line is open, please ask your question.

**Olivia Charley (Goldman Sachs):** Hi. Morning, everyone. Thanks very much for taking my questions. My first question is just a follow-up on the shop visits. I know you just mentioned with Chloe that you're expecting to see a big step up in the number of shop visits happening in the second half, and I was wondering if you could just give us some more colour on that. I mean, I can see from the release on the first half, there's only been a pretty modest step up in shop visit numbers in the first half. And the guidance I think that you've given for the full year implies a sort of 20% increase in the midpoint. So I'm just wondering what's driving that really material step up in the second half and what kind of is giving you confidence in the ability to sort of step those volumes up?

And then just a second question around engine flying hours. Could you give us a sense of what the exit rate is for the first half or where you're tracking roughly now, and therefore what you're expecting to see in the second half? And then also just sort of what gives you confidence in this path to full recovery by 2024, and what are you seeing in sort of Asia Pacific and China as well? Thank you very much.

**Warren East:** Okay.

**Panos Kakoullis:** I'll do the first one.

**Warren East:** Yeah.

**Panos Kakoullis:** Just in terms of shop visits, Olivia, so you saw just over, I think, just over 400 in the first half, and we are guiding to around between 1,100 and 1,200 over the full year. And the big driver of that, frankly, is the engine flying hours growth. It's – it – as that growth comes back, the shop visits follow. So that's what we're seeing. That's what we're seeing effectively being scheduled as we go into the second half. So, that's the big driver around that.

**Warren East:** Yeah. And on engine flying, our trajectory, then, as I said a few moments ago, for the first half as a total, then we're at about 60% of 2019 levels. We guided for between 60% and 70% for the year as a whole. We're reasonably comfortable with that now, because obviously having got to 60% for the first half, the exit rate is above 60%. You know, we track it on a weekly basis, and, you know, we – or we have had over the recent weeks around about 60%, 65%, or so. Now, exactly how much of that is going to continue into Q4, it's hard for us to say. But, you know, we – having, having reached 65%, we're pretty confident we can see through our Power Systems business, actually early signs of the actual lockdown situation in China starting to get a bit better.

The lockdown situation in China has been the key retardant for the Rolls-Royce fleet of engines in terms of keeping our engine flying hours back. So I think that's going to be a contributory factor in the second half, to move up from these rates towards the 70%, as we get to the year-end. And, you know, elsewhere in Asia, we are seeing demand and flights full. We spoke to a lot of airlines at Farnborough a few weeks ago, and people are reporting full flights and challenges with actually being able to sort of deliver on those. So, it's not a demand issue at the moment. So, we're still confident of that recovery in '24. I think it will depend – you know, the actual rate will depend on the broader economic climate, and it's a little bit too early to speculate on that actual rate. But you can see us getting very close to 2019 levels by 2024.

**Panos Kakoullis:** And then just, maybe, just to give it a little bit more colour around China, so I think when we look back to 2019, China was around – China Airlines were about 17% of engine flying hours.

**Warren East:** Yeah.

**Panos Kakoullis:** They're around 11% at the moment, and they're at 40% of 2019 levels. There's quite a lot of scope for growth within as those lockdown lockdowns ease.

**Warren East:** Yeah.

**Olivia Charley:** Brilliant, thanks.

**Operator:** Thank you. The next question comes from the line of Andrew Humphrey from Morgan Stanley. Your line is open, please ask your question.

**Andrew Humphrey (Morgan Stanley):** Hi, good morning. Thanks very much. I've got a couple on Power Systems. If I may, firstly, it seems like a lot of the strength you highlighted in orders there was around, you know, backup power supply and the like. Can you go into a bit more detail on what is driving that particular strength in the short term? Clearly, a lot of the discussions that we're having at the moment are around potential gas shortages in Europe over the winter. Is there any kind of overlap there with your business?

And secondly on that, I'm going to ask a bit more about inventory. You've highlighted that you're expecting some unwind in the inventory you've built up over the second half of the year. I wanted to kind of ask about the character of that. I mean, is that inventory build in the first half, has that been sort of prophylactic to protect against, some of the supply chain issues that we're seeing, or are there kind of project delays that we need to keep an eye on? And to what extent are those within your control?

**Warren East:** Okay, let me kick off. I think some of the demand that we're seeing around PowerGen at the moment is a little bit of, you know, recovery from projects that were held up during 2020 and 2021. And so, you know, we're seeing the orders come through from those now. And, yes, PowerGen has been strong.

With regard to the sort of overall energy situation, gas – potential gas rationing in Europe and so on, actually this is being a positive driver for us, not so much in terms of PowerGen, but in terms of, you know, demand for engines for fracking, as people seek to mitigate the gas supply challenges. So, we've actually seen a positive impact as a result of that.

I think the inventory build is, no, it's not to do with project delays. It's to do with a combination of proactive building for the second half, which under normal circumstances we do anyway in Power Systems to manage our load throughout the year, but also the supply chain challenges and the blockages. I think the panel said a few moments ago – mentioned about the semiconductors that we've seen holding us back in Power Systems, and some of it is undoubtedly due to that. One of these task forces that the panel's referred to and – is specifically around semiconductors in Power Systems. And, you know, we have been successful there and we've secured supplies for ourselves and for our suppliers so that we can get that inventory shifted in the second half of the year. And we're continuing with that task force, by the way, because, you know, we do anticipate that to be a very tight situation, at least into the middle of 2023. And so we – you know, we want to clear the way ideally through to the end of 2023, as far as that particular part of the supply chain's concerned.

**Panos Kakoullis:** Yeah, maybe just to give you a little bit of a broader feel around supply chain within power systems.

**Warren East:** Yeah.

**Panos Kakoullis:** Because it was, I think, at this time last year we were highlighting it as, you know, we could see some of that coming, and it's maybe an advantage of having a shorter cycle business within the group that we can see that a little bit earlier than maybe in the longer cycle businesses. But every week, there's broadly 30 to 50 suppliers that the team there are constantly monitoring what is going on there, because any one – and in not just microchips; it could be across a number of areas that any one of those could cause a bit of a line stop. So they manage it at a very tight level, and you can see that, what that trend looks looks like on a week-to-week basis. So, it's that sort of level of granularity to make sure we keep production going

**Warren East:** And tracking that, we saw through the second half of last year. And we reported, in fact, that in our full year results, how that had trended down during the second half of the year and into Q4. But it has trended up again in the first part of this year, and, you know, what we are seeing is the impact of that right now.

I think – I think that's it. Thanks, Andrew.

**Andrew:** Thank you. Thanks. Sorry, my line just went dead for a minute.

**Operator:** Thank you, Andrew. The next question comes from the line of Nick Cunningham from Agency Partners. Your line is open, please ask your question.

**Nick Cunningham (Agency Partners):** Thanks very much. Good morning, everybody. Yes, coming back to EFH, it looks very much like you'll hit the 80% number sometime in ’23, perhaps on average for ’23 as a whole. And you used to say not so long ago that that 80% was key to a free cash flow, and I think as much as £750 million. Does that – do you still recognise that number? Does it still stand? And if not, what – what's different? You know, in very broad terms, what are the big deltas, if you like?

And then the second question is much more general and sort of geopolitical, if you like, around China risk. I mean, Russia has obviously shown us the risk to trapped assets for Western corporates. China's an order of – several orders of magnitude bigger than that, plus also a much greater supply chain risk, and it's a really big end market which Russia wasn't. Is there anything at all Rolls-Royce can do to manage that risk, or is it just there? Or at least is there something you can do to manage that risk on an medium term basis? Is it something you think about? Thank you.

**Warren East:** Yeah, I didn't – I didn't actually fully hear that second part of that question. Did you?

**Panos Kakoullis:** No.

**Warren East:** No, I think –

**Panos Kakoullis:** So do the EFH.

**Warren East:** Let's do the EFH one. I mean, broadly, Nick, yes, we, at the same time, gave a rule of thumb that said approximately £30 million for 1%. And, you know, if we are around about 60–65% for somewhere between 60% and 70% for the year as a whole, then the extra sort of 15% gives us an extra £450 million, which broadly puts us into the zone. So, I don't think we're sort of too far out, now, obviously, there's been – you know, since we made that comment, there's been a huge number of puts and takes and changes in the boundary conditions around there. But, yeah, I think if you peer at those numbers, you can still see it

**Panos Kakoullis:** Yeah, I guess the bit I'd add on that, you know, that lots of things have changed since then. We talked about some of the other risks and challenges. We'll give guidance on '23 when we get there.

**Warren East:** When we get there, yeah, absolutely. Yeah. Nick, is there any chance you could sort of repeat the China bit?

**Nick Cunningham:** Yeah. Yeah, sorry. What I was saying was that there's clearly increasing geopolitical risk around China and around supply chain, end market demand, trapped, potential trapped assets of – like we saw in Russia. Is there anything that Rolls-Royce can do to manage that risk in perhaps not in the near term, but in the medium term? Or is it just too big to be able to manage that?

**Warren East:** Yeah. Well, look, China remains an important market for us for both Civil Aerospace and for Power Systems. And, you know, for the time being, we are continuing to do that business in China. And, you know, I see huge demand for air travel in China on wide body jets, and I don't actually see the Chinese getting those jets from anywhere else right now, other than the Western suppliers. And, you know, so the Chinese airlines remain important customers for us, I think for the foreseeable future. Yes, there's geopolitics, which is going to happen around that, but we can only control what we can control, and that means supporting our Chinese customers.

In terms of the supply chain, then, you know, we totally understand that there may be some tightening of the export control sort of in regulations and what we're allowed to source from where and so on, but we aren't hugely dependent on Chinese suppliers. And in most cases, you know, we have multiple suppliers for every vital commodity that we really need, or every vital part. We do have, you know, a small handful of single source suppliers, but we're not really seeing China as a major risk there at the moment. It's one to be monitored, it's clearly in the discussion for us as an executive team, it's clearly in the discussion for us as a board. And I think you can rely on us behaving quite sensibly around that.

**Panos Kakoullis:** And I think just to speak on that, specifically coming into this year, a lot of things changed geopolitically as we came into the – this year.

**Warren East:** Yeah.

**Panos Kakoullis:** And what we've been very active in doing, and Warren talked about, as an executive and as a board, making sure we properly scenario plan. And we looked at two particular new emerging risks coming into the year: inflation and how we were going to manage and risk-manage around inflation; and the other one was around China.

**Warren East:** It was.

**Panos Kakoullis:** What if there was something very dramatic on China? We're not just going to wait to react to it. What can we do now to make sure we're in the right position?

**Nick Cunningham:** Thank you, that's encouraging. Thanks.

**Operator:** Thank you, Nick. Please stand by. The next question comes line of Harry Breach from Stifel. Your line is open. Please ask a question.

**Harry Breach (Stifel):** Yes. Good morning, Warren. Good morning, Panos.

**Warren East:** Good morning.

**Harry Breach:** Thanks for taking my question, and I'm sorry if I've missed some things but the line quality here has been a bit troublesome. Two – one, if I can. Firstly, guys, time and material, we almost don't talk about it anymore on the calls, but it more than doubled in the first half. And it was more than all of your P&L, half the market revenue growth. Yet we're still less than half below our previous 60% below our previous sort of first half sort of peaking levels in T&M. I'm just wondering if you can give us any flavour in terms of shop visit demand on that side of the business, how that's trending.

And then secondly, guys, just sort of returning to a popular theme of escalation, on the OE side, my understanding is that it applies to your schedules of PDPs and PUPs, right? So therefore, it's going to accelerate the cash you get coming in, so you should, in fact, get that on the OE side. At any rate, you should be getting a benefit from timing from higher escalation rates. Right? We've shown this to be cash in. Is that a correct understanding on the OE side, or is there something I'm missing?

**Warren East:** Yeah. Did – were you able to look at the detail on T&M just then?

**Panos Kakoullis:** Yeah. And I – the interaction that's going on, on T&M, so. And I think you're probably looking at one of the notes in the accounts around things that are a point in time, as opposed to over time. Within T&M, there will be pure T&M that you are referring to, but there'll also be elements that are covered under our long-term service agreement that aren't within the scope of that. So, there'll be some parts, for example, that end up being within that. Going forward, we see sort of T&M being – as we get to a more normalised level, it's still around about – from a Civil Aerospace perspective, think of it as around 20% of the business. Yeah. When we're at the levels now, and as we're going through that recovery, you can get some of the distortions that you're talking about.

**Warren East:** Yeah. And the escalation clauses on OE and the timing, I think this is a variation on the very first question, actually, about the timing of us getting cash payments and escalation and the cost coming out later. And it's the same answer. You know, we've managed the contract. Obviously, it's good to be able to enforce escalation, and then we have to manage the cost side of the equation. And, you know, we – that's what we're doing and that's what we've described. And if we can tilt that balance so that the customer and the supplier piece is in our favour, and we can do that in a win-win way with our suppliers, then that's good news and that's what we are setting out to do.

**Harry Breach:** Okay. Thank you very much.

**Panos Kakoullis:** Thanks, Harry.

**Warren East:** Thanks.

**Operator:** Thank you, Harry. Now, we're going to take our last question. And the last question comes from the line of Zafar Khan of Société Générale. Your line is open, please ask your question.

**Zafar Khan (Société Générale):** Thank you very much. Good morning, everyone.

**Warren East:** Good morning.

**Panos Kakoullis:** Good morning.

**Zafar Khan:** I've got a couple of clarification questions, please, and then one on costs. Starting with the costs one, I noticed the commercial and admin costs in the first half, it's up by about 15%, half on half. Just wondered if there was some one-off in there, or is as business resumes and starts to take off, the costs, inflation, then comes in.

And then the two clarifications, please. Just on the indexation, I imagine there must be a cap in terms of how much inflation can be charged in any year, and then there's kind of acts of God. And with inflation running at 9%, 10%, will you have to bear quite a bit of that increase yourselves, because I imagine you'll have to share the pain with the customers?

And then just a clarification on the cash and shop visit. I think in answer to David's question, Panos, you were saying that there, you expect a lot more shop visits and therefore that should help the LTSA cash inflow. Now, I'm getting confused here. I was under the impression that shop visits means you can recognise revenue, which is basically a P&L item, but, you know, if you're doing the work, then you're incurring cash costs so more shop visits that you have. Okay, it benefits the P&L, but it's negative for cash flow, so just need a clarification on that, please.

**Panos Kakoullis:** Sure. Let me pick – I can pick up all three of those. So, I think you talked about the C&A growth around about 16%. There is an element that's effectively underlying growth of the businesses as in fulfilling on the Power System sides, that sort of growth and then as Civil Aerospace picks up. You have also – you are 'anniversary-ing' a one-off too. So in last year's comparative, we have got a benefit of furlough for part of the period so that, as we get into the full year, you should see a more normalised level of growth.

In terms of indexation, I think there was a question earlier on a similar sort of theme. It – it's not a cap, it's a collar. So up to a certain level, we can pass it on. Then there's a collar of a couple – two or three percentage points that we can't pass on. And then beyond that, what's called effectively a hyperinflationary clause kicks in, which means we can pass on again, so there's not a ceiling on this. You are bound to have customer discussions around, how that is going to be enforced and how it works. What's going to be important for us is we apply rigorous commercial discipline in having those discussions.

The point I was making on the – on your final question was, I think – because David was asking how much is that LTSA creditor going grow. And what causes it to grow is engine flying hours, cash comes in. What causes it to shrink is shop visits happening because as the shop visit happens, it comes out of that and goes into revenue in the P&L. So that's – I was –

when David was asking me how much is it going to grow by, engine flying hours cause it to go up, shop visits cause it to go down a bit. That's how I would – in terms of what that means from a cash perspective, if you think about it from a P&L perspective, the costs that go with the shop visit would similarly go into the P&L at the same time. So, you'd see the revenue and the costs to do with the shop visit going through the P&L. That turns into operating profit from – in terms of the start of your bridge from operating profit to free cash flow.

**Zafar Khan:** That's helpful. Thank you very much.

**Warren East:** Yeah. And I'm being told there are no further questions, so just to quickly summarise, you know, the message that we've been talking about this morning is one of good progress. And we measure good progress by growth in revenue, growth in orders, a big swing round in cash driven by a strong recovery coming through now in commercial aerospace, driven by continued strength and record orders in our power systems business and good visibility on defence.

We've also talked a lot about the operational challenges that we are seeing just the same as everybody else and just the same as we've been talking about. But we are doing a lot of blocking and tackling, we're doing a lot of anticipation and put a lot of long-term protection in, to ensure both supply and protection against inflation. And taken together, that progress combined with the discipline, the operational discipline, commercial discipline protecting us against those external pressures is what's enabling us to maintain our guidance. And yesterday, we announced completion of the conditions or complete – the final approval – regulatory approval for the ITP transaction. And so, we're delivering on that commitment of strengthening up the balance sheet, and we'll be paying down that debt just as soon as we get the proceeds. So that's it, that's a summary of the message, and thank you all very much for joining us.

[END OF TRANSCRIPT]