



Rolls-Royce

Marine Capital Markets Day Presentation

CEO Welcome and Q&A

Monday, 20th October 2014

Speakers:

John Rishton, CEO

Mark Morris, CFO

Introduction

Simon Goodson

Director, Investor Relations, Rolls-Royce

Welcome

Good evening everybody. For those that do not know me, my name is Simon Goodson. I head up the Group's Investor Relations activities. Just a few housekeeping items before I hand straight over to John.

Safe Harbour

Firstly, safe harbour language that many of you have heard before: over tonight and tomorrow you will hear various forward-looking statements about the Group and its underlying businesses. Those statements are based on our current view of the future, and of course can change over time. Please take them in that vein.

Marine CMD

John Rishton

Chief Executive, Rolls-Royce

Welcome to Ålesund

Thanks, Simon. Good evening, welcome, thank you very much indeed for joining us here in what is probably the wettest part of Europe. I am told reliably that in Bergen it rains 362 days of the year and maybe one or two days less here. It is really good to see everybody here. We do appreciate the amount of effort that you have made to come and visit us.

Earlier this year we were criticised about our communications and we committed to try to improve those communications. If I talk about communications I am going to split it into two parts. The first part is really about helping you understand our business better. Clearly bringing you to Ålesund, clearly getting our Marine team here with the events that we have got planned over the next day, is part of helping you understand our business better.

The second part around communications is updating you on the business and how the performance is going. As you are all well aware on Friday we issued a trading statement which covered the current year, 2015, and the medium term outlook. We had a lot of feedback from the announcements that we made on Friday, as you would expect. We will reflect carefully and thoughtfully on the feedback that we have received.

We are trying to go from providing only in-year guidance to providing a lot more information. I know, because you have told us so, that you want more information and that we did not fulfil everything you expected us to do last week in terms of the information requirements. We understand that and we will reflect carefully, as I say, and thoughtfully on how we can improve that.

The fundamentals of this business are strong. You are aware of that. You are aware that on the Civil Aviation side the demand for aircraft in the future is underpinned by growth in emerging markets, where we are seeing 100 million people a year enter the middle classes. We are seeing huge population growth over the next 10-15 years. A billion more people on the planet by 2025.

You are also aware that the carriers today with the fuel costs are looking for all ways that they can to reduce that primary cost of their business. The way that they do that is by replacing old kit with new kit. The demand on the Civil side of the business, the fundamentals there are strong.

The fundamentals on the Land & Sea side of the business are different but equally strong. The demand for energy in the world will increase and it will increase significantly in the coming years. Driven by similar

factors: population growth, urbanisation and increasing affluence. Any forecast you look at for energy growth you will see an increase. However, in the short term we are being impacted by the economic environment. We have seen that deteriorate quite quickly in the recent months. The thing that you have all seen, for example, is the reduction in oil prices over that period of time, from around \$100 a barrel down to, I think I saw it at \$83. I do not know what it is today. Significant reductions there.

That says that we have to focus on the things that we can control rather than the things that we would like to control. It says that our revenue line is going to be impacted which means that we have to put more effort into accelerating our focus on costs. That is what we will do.

Rolls-Royce in Norway

Let me show you a video.

[VIDEO]

An anchor handler: I have been on one of those. Fortunately I have to say it was in the harbour, not out at sea. I have the greatest admiration for the people that go out there on those ships. It does not look particularly attractive to me.

Tomorrow we are going to get you out on a ship. You will be delighted to know that in your packs when you get to the hotel you will find a poncho and a warm hat. I would advise you to bring them tomorrow.

1904 was a big year for Rolls-Royce and a big year in Ålesund. In 1904 Charles Rolls met Henry Royce in the UK and they formed this company. In 1904 in Ålesund the town burnt down. It was made entirely of wood and a cow kicked over a lamp, burnt the whole town down in January. It was completely rebuilt from stone and is pretty much as you see it today. It is a very attractive town and one that I would recommend that if you get any chance you have a little look at.

Norway is about 0.1% of the world's population. It punches well above its weight in terms of the maritime industry. It controls the second biggest maritime fleet in the world and it has leading technology in this country. We have an important part to play in Ålesund. We are an important business in this area. If you look around Ålesund you will find 14 shipyards. You will find over 100 suppliers. You will find 22,000 people employed in the Marine industry, about 3,000 from Rolls-Royce.

We have this centre which is our Technology & Training Centre, which is where you are sitting now. Here you are going to find and you will get a chance to see some of the most sophisticated simulators that there are in the world. I would encourage you to have a look at them tomorrow because if you do not get sick on the boat you will probably get yourself sick in the simulator.

We have a factory at Ulsteinvik which is a ferry ride away from here, about 30 minutes' drive where we make thrusters. Our steering gears are made at another factor in Braatvåg which is about a 30-40 minute drive round the fjord. We have on an island called Longva our automations and control business. This is an important centre for Rolls-Royce, an important centre for maritime in the industry, very important in terms of the Oil & Gas business.

Tomorrow one of our most important customers, Island Offshore, is lending us one of their vessels, Island Pride, which is a PSV. It is a UT-designed vessel. UT is Rolls-Royce design. There are 800 UT vessels that have been made. The first one was made 40 years ago. It is still in service today. We get decades of revenue from these vessels. The original designer worked for this company. His son works for this company. His son is currently designing the most complicated and sophisticated UT vessel that we have, the UT777. I was delighted to learn that because I reckon it is the only way I am going to get an engine on a 777.

Mega trends drive our growth

These are the megatrends that drive our growth. As I have mentioned, a billion more people on the planet by 2025. Urban growth, 1.5 million people more per week moving into the urban areas. 100 million people a year join the middle classes. Climate change, a major issue. 90% of the world's trade is by sea. Much tighter regulation on emissions in Marine. Rather surprisingly other areas, whether that is cars or aircraft, have had much stricter emissions controls for much longer. Emission controls is a huge and changing issue within our industry and we have the technology to address that. Huge increases in energy demand and 30% increase in demand for energy around the world in the future.

These are the global trends that are driving our business and there are very few companies in the world that have the capability to be able to address these trends. We are a complex, integrated, power systems business. That is the common spine across the whole of the company. It is what we do and what you are going to learn over the next day is how complex some of the business is that we do in Marine that many of you will think is fairly straightforward. This is a complex, integrated power systems business with an original equipment and after-market market. That is a common element across Rolls-Royce.

Offshore

What is interesting in the Marine business, particularly the Oil & Gas business, is that oil finds are further out at sea and deeper down. The environment in which the oil companies have to invest is getting more and more challenging. That plays to our strengths. The original Oil & Gas vessels that we used in the Gulf of Mexico proved useless in the North Sea because they could not cope with the conditions. That is why Norway became a centre of expertise for developing those vessels that could cope with harsh conditions, that could manage deep sea exploration. That is what we do. That is what we are. That is what there is going to be more of in the future.

We know that the oil companies, whilst they are reducing their investment at the moment, will inevitably have to increase their capital expenditure in the future to explore those deeper and more difficult-to-get-to fields. That plays to our strengths.

Enviroship

Innovation also plays to our strength. This is a picture of something that is called an Enviroship and there is one operating just down the coast from here. The second one will be in China. 90% less NO_x, 40% CO₂ than its predecessors.

In the Aerospace business I am spending billions of pounds employing brilliant people and they are driving 1% fuel efficient improvement in a year on average. 90% reduction in NO_x, 40% reduction in CO₂. That is an extraordinary transformation. It relies on four critical parts to it: the engine, the hull, the Promas propeller and rudder system – fortunately there are people in this room that can explain those far more articulately than I can – and the Hybrid Shaft Generator which I am sure you are all very familiar with.

That is the kind of technology that we do that transforms the business that is demanded in the new world where the environment and emissions are getting more and more important to the industry.

Bergen B33:45

This is the Bergen B33:45, named by our marketing department that spend years trying to come up with a catchy name. The 33 is the diameter. The 45 is the stroke. We are not imaginative. However, what we are good at technology.

20% more power per cylinder, significant improvement in fuel, reduced service costs. And here is the thing to put it in perspective for people are used to the Aerospace business: this took us three years and cost £25 million. It comes off the basis of the existing engines so if we developed a completely brand new

engine and Ulrich will talk about that. Ulrich Dohle who is the CEO of the Power Systems business will talk about that, certainly a little bit maybe tomorrow but certainly when we get out to Germany next year.

Three years, £25 million, 20% improvement power per cylinder, designed in conjunction with our customers who decided that was the kind of engine that they wanted. The block can use gas or liquid. It does not require any changes to the block. Very sophisticated, brand new, three years.

Summary

Let me just conclude this brief introduction with three things that I think would be helpful that you remember because over the next day or so you are going to get bombarded with information about our Marine business from a number of people that I will introduce to you over dinner tonight.

Strong demand

The medium and longer term demand in this business is strong. The fundamentals are strong. We have intimate relationships with our customers, particularly here in Norway. We know them very, very well. They know us very, very well. They talk to us all the time. We are aware of what they want and why they want it. That is why we can do the kind of things that we do. We work hand in glove with them. The underlying fundamentals of the business are strong.

Relevant technology

We have some extraordinary technology. It is complicated and sophisticated. It is not quite, as many of you I am sure, imagine. When you get to speak to the guys on the ship tomorrow; when you talk to them about what they do, how they do it and how they rely on what we do; when you talk to people about the integration of those systems within the vessels; when you understand the critical nature, of the mission-critical nature, of the safety elements of them. It is extraordinary. A winch, which many of you will think of as being a simple item of technology that just winds in and winds out, let me tell you, when you get to see the winches on an anchor handler, they take you to a different place. These are sophisticated winches, incredibly complicated. Our Head of Innovation will talk to you tomorrow about what we are doing in Innovation.

Execution

The fundamentals of the business are strong. Intimate customer relationships, strong technology which sounds pretty much like our strategy: understand your customer, make sure that you satisfy your customer, understand the technology, deliver superior technology that the customers want and need and are prepared to pay for. In combination we will drive profitable growth.

This is an exciting business. This is a really exciting business. This is a business with a wonderful future. This is a business that has grown up over many years. Norway is the heart of the Marine business for Oil & Gas. Norway understands the complex nature of getting oil out of the sea in harsh conditions. Rolls-Royce understands that intimately. This is where we are from. This is what we do. As the world wants more oil from difficult-to-get-to places like the Arctic, this is the company they are going to come to.

Now Mark and I are very happy to take questions on anything you care to raise. Tomorrow you will have a chance to ask questions specifically around the Marine business. We will take questions on anything you have today because we have got experts in the Marine business sitting with us tonight.

Q&A

John Rishton and Mark Morris

Chief Executive & Chief Financial Officer, Rolls-Royce

Jeremy Bragg (Redburn): I am afraid I am wanting to go back to the guidance, the medium term guidance.

John Rishton: I guessed you might do. Fortunately, I have got Mark with me so we are okay.

Jeremy Bragg: I just wanted to understand about the decision not to guide on revenues, specifically Civil revenues. I understand that the short cycle industrial businesses are volatile but you should have a pretty good idea of your revenue number in 2018 or whenever the medium term is defined as for Civil which has allowed you to give the margin target. I wondered if you might comment on where you think Civil revenues would be then please?

John Rishton: Clearly, one of the things that we have disappointed people with is the absence of revenue information across the piece, and if I split that into two parts, there is the Civil part which you are talking about, and there is the Land & Sea. We reflected on that and we decided that we would not give revenue information at this time. I think that it is at least to my mind understandable on the Land & Sea side, which is the point that you are getting to. In the sense that trying to predict exactly when the economic recovery and who is going to spend what and those kind of things; shorter cycle businesses are more difficult predict. However, we have been criticised for not giving that and we have heard that criticism.

On the Civil side certainly one of the reflections that we could give is should we give some guidance on Civil revenue and I am not clearly going to answer your question off the cuff tonight as you would expect. However, what I am assuring you and everybody else of is that we are very clear on that kind of feedback and we listen to it. We are working hard to make the transition from providing only in-year guidance which is what we have done for the last 30 years or whatever – a long period of time to in-year, next year and the medium term. Whilst that sounds relatively straightforward it is a journey in my view. We know that we have got some way to go on it.

However, I take your point. We reflect on it and we will not ignore the point. We will reflect carefully on it and we will come back and explain what we are or not going to do.

David Perry (J.P. Morgan): John, on Friday you painted this dystopian view of the world. China is bad, Brazil is slowing, Russia is bad, commodities are down, and Eurozone is weak. However, your guidance seems to imply that all three of your industrial divisions are going to have rising profits in 2015. If I have understood that correct, can you try and square that circle for me?

John Rishton: Mark, do you want to comment a little bit on that?

Mark Morris: I think in terms of this is 2015 you are looking at. I do not think you can infer that in terms of what we have said so far.

David Perry: You said Civil is down clearly on the call. Defence, maybe it is not down, but you are trending mid-teens margins is your trend in this year 2014-2017. To get to your profit guidance MIPS has to be up significantly and yet all this recent [inaudible] John talked about is going to be much more of an issue next year than it is this year.

Mark Morris: Your maths does not quite work.

David Perry: If my maths does not work can you clarify because I think everyone in the room shares my maths. We have all been on the same plane. We are all thinking the same thing.

Mark Morris: First of all, we have not guided at any segment level and, of course, when you try and add up segment numbers which we have not even given you for 2015 yet other than some inference about direction of travel on the Civil relative to 2014, you cannot conclude that assessment. It is also just worth recognising obviously when we talk about Group and with the segments themselves you cannot just do a straight add-up from segments to Group because there is some inter-Group trading as well that comes through. There are some numbers you need to get stripped out of there. I do not think there is anything in

there that suggests for a second that and we have not given guidance on any of the divisions yet so when we get to 2015 we will give guidance on 2015 by segments.

John Rishton: What I would say, David, is clearly we have seen a weakening in those divisions during the course of this year so you have got to get to what 2014 is. Then you have got to get to what 2015 is. Then we have got to understand what the Civil growth is in terms of what we think is going to happen next year. There is a combination of moving parts there that make that the conclusion that you have reached which I understand. We will reflect on that. Then there is the range that we have provided clearly which is a fairly broad range on revenue and a fairly broad range on profits coming off the forecast that we have got for this year. Again, I understand the point that you have made and we need to reflect a little on that as well.

Rami Myerson (Investec): Two questions. I appreciate that it is quite difficult to provide a number or a range three or four years from now, particularly given the volatility in the markets. However it would be helpful potentially to try and talk particularly maybe in the Marine business about sensitivity, particularly the oil price, going from \$100 to \$80 or maybe a different direction, how that would potentially impact the revenues as annual expectations for growth in Marine services? The second question is just on technical. The 80% cash conversion, because you have changed the definition, the cash guidance, can you just clarify what exactly that implies?

John Rishton: Maybe I will get Mark to talk a little bit about cash. In terms of the oil price clearly a reduction in oil price will inevitably force oil companies to reflect on their cash flows and what it is they are going to spend and how much they are going to spend. Clearly that is not something that I control. It really is not a direct tie between a price of this and an investment spend of that. However, clearly it is an important consideration. One of the things that Mikael Makinen, who is the President of Marine, is going to talk to you a little bit about tomorrow is the cycles that we see in Marine and where we play in those different cycles. What you see in the Marine business, the Oil & Gas business, is first of all you have got the exploration parts so there is the seismic vessels that we play a part in. Where is the oil? Then you see the development into platforms, supply vessels, anchor handlers. You have got this cycle going on.

One of the things that makes it slightly more complicated and Mikael, as I say, will talk quite a bit more about this tomorrow, is where exactly are we playing in those cycles? Where is the value for us? Where do we think we are in those cycles because one of the things that may be slightly surprising and again, I am looking at Mikael, is that we have got orders for anchor handlers which surprised a number of people because people [inaudible] anchor handlers should be down. However, actually we have got new orders for anchor handlers coming in because of where companies are in the cycle. You have got the oil price what determines in some shape, size or form how much the oil companies are going to spend. Then you have got the decision in the oil companies about where they are going to put that spend. That to a certain extent depends on where they are on the projects and what they are trying to bring online.

I am not an Oil & Gas guy but if I understand their kind of business the thing that they know about and understand about the best is oil under the sea. They know that. They get that. That is not where their major capital expenditure is. That tends to be in the big LNG and some of the more challenging environments. There is not in my view an absolute direct link that says if the oil price goes from \$100 to \$80 then this happens and this happens and this happens to us and vice versa because of the different cycles that we operate in. However, there clearly is a linkage because it affects the total spend. I do not know if Mikael if you are going to cover a little bit more of that tomorrow.

On the cash conversion, Mark?

Mark Morris: Your question was about?

A series of questions followed about cash conversion that were clarified later by the following e-mail:

Following our announcement last Friday, we have received a number of queries around the definition of Free Cash Flow (FCF) and cash conversion that we are using. We recognise that there are a number of different definitions that are used.

To clarify, the definitions we use are shown below:

1. Free cash flow = Total cash flow excluding M&A, FX and payments to shareholders.
2. Trading cash flow = Free cash flow excluding Tax and pension deficit reduction payments.
3. Cash conversion = Trading cash flow divided by Underlying Profit before Tax. This definition has been used for the Medium Term Outlook.

For reference, the 2013 figures were:

1. Free cash flow = £781m
2. Cash conversion = (£1,131m divided by £1,759m) = 64%

John Rishton: If I just pick up on that because it is a point that I made and was made in the press release but I want to go back to it. What we have said on the Civil business is as the OE levels off you get this shift between the after-market and the OE which you are all familiar with. As the products mature you have gone through parts of the launch pricing. You have gone through parts of the launch costs. As the volume increases we utilise our capacity far more effectively. What I said in June was, based on our view that happened. I used the term inflection point, was 2018. I think a couple of people have said, 'Is it really an inflection?' What I mean by that is it starts to level off and that is when you start to see the change in the dynamics of the things that I have just talked about in terms of the financials, including the cash conversion.

Ben Fidler (Deutsche Bank): A couple of questions. The first one is just coming back to one of your opening comments, John, which is it is time to focus on the things that you can control which are your costs. We are two and a half, three years into the four Cs, but the three of them that are Cost, Cash, Customer. Your guidance for Civil Aerospace for 2015 is back to historical average margin of 12%. History did not actually have the IE earn out in so maybe we are slightly below historical average. What does that imply about the real, tangible progress we have seen on costs in terms of thus far, and why physically we are not seeing it in that underlying Civil margin?

John Rishton: I understand the question. Let me talk about a couple of things. I think that in some parts of the business we have made good progress on costs. In others we have made okay and in some we have made less. One of the things that people have said about Defence is irrespective of the fact that the balance between OE and after-market is shifted to manage with a 15-20% reduction in revenue and manage to maintain the margin is generally a good indication that we have made some progress on cost in that part of the business. In other parts of the business we have made less so. I think in Marine we have started and in fact we made the announcement last week that we were closing one of our plants down the road in Bergen which also makes steering gear and we will consolidate that into Braatvåg. We have made a number of other announcements of plant closures in Marine.

In Civil we have got a couple of things going on and that makes it complicated. I understand that that is not particularly helpful for anyone. What is going on? First of all we have got significant amount of capacity that has been put in place and you have all heard me give the example of Singapore in terms of the capacity we have put in place there and the utilisation of that capacity.

Secondly, we have got load which is not increasing as much as we would have anticipated and at least part of that is good news because a part of that relates to the fact that we are increasing the life of our engines on wing which is saving us costs. The example that Tony Wood gave in June was the life-on-wing of the

Trent 700 has increased. That is a good thing for competition reasons obviously and also for financial reasons. What that means is I need less spare parts which means that we need the factories to produce less for a period of time.

The third thing is that we have got inventory buffers in place that we were using historically to protect the customers which as we improve our customer performance and we improve our performance to plan we can start to reduce, which means that we need to lower the load because I do not need to rebuild those buffers. I have got those headwinds coming towards me in terms of the cost of performance.

The other things that are going on for example when you start talking about 2015 and again things that you are familiar with would be the launch of the XWB which is a lot of launch costs, low-ish volumes in un-linked contracts. Against that, as I said in June, what we are doing on the Aerospace side in terms of the cost performance where we have got hundreds of engineers working on it is that we are offsetting the escalation that we are seeing on the OE and we are making good progress in terms of the after-market. A lot of that is being masked by some of these other things. In the current year we are getting some benefits from that and Mark talked a little bit about that on Friday in terms of the specific cost benefits that we have got in 2014 and how some parts of them relate to the catch-up from previous years because of the way the total care accounting works which you are familiar with. You do not get that again or you do not forecast that we are going to get that again next year.

It is a combination of factors that are taking place here, none of which by themselves caused any specific problem but in total those are the headwinds that we are running against in terms of costs. In order to get to the improved margins, and one of the things again you have given us strong feedback on, is how do we get from here to there? What is the bridge? Again, we are reflecting on that. The increase in the volume, the better utilisation of capacity, the continued work about extension of life-on-wing, the greater focus in terms of all the costs associated with the direct and indirect labour. We are working on all of those things. I understand your question completely and that is the answer that I have. Good progress in some parts, okay in others. In Civil lots of work going on and evidence of some progress in parts of it, particularly the after-care. However, because of the increase in capacity, because of the load, because of a number of other specific Civil factors, you are not seeing it immediately flying through into the bottom line.

Ben Fidler: Are you able to shape in any way what you think that cost drag is from capacity under-utilisation, either in a margin basis point number? It helps your story if we have some shape around that.

John Rishton: It sounds defensive. We in the business, from the Board down, listen to, read what you say to us and discuss those things about how best we can help us. I am not trying to be defensive. It feels that way. The transition from where we were, years and years and years of only giving in-year guidance, to where we are trying to get to is not as straightforward for us as you would like it to be. We are struggling with that. However, again we are reflecting carefully on this kind of feedback.

Christian Laughlin (Bernstein Research): Just two questions from me please on Civil. Going back to the medium term guidance in the period you referred to as the bridge between now and then. I am not looking for 2016 or 2017 guidance, but trying to think about 2015, 2016 and 2017, can you point out a particular year where you think there will be a trough margin?

The second question is coming back on Friday's call a bit, Mark had mentioned something about one of the drivers behind the free cash flow guidance cut for 2014 was inventory management or drag or a headwind from a slower inventory turns. If you could just add any comments or colour on that because I thought that was one metric in particular that had been positively trending in recent periods.

John Rishton: Let me start with the second one and maybe ask Mark to comment on the first one if that is okay? In terms of the inventory we have seen improved turns performance. We saw quite a significant improvement in turns during the course of last year and we saw some improvement during the first half of

this year. Going back to the point that I was making to Ben in terms of the load, as we have pushed out the life-on-wing and as we are trying to reduce the inventory we have got different pressures on us, which is we can keep putting stuff in the factories or we can try and take it out. We are just struggling with that balance. We have got that, again, working a little bit against us during the course of this year. Whilst I am sure we are going to make progress in many parts of the business it is not as much as we wanted. Part of the problem in terms of the inventory is with the revenue being lower so you are not shipping as much so you get that drag as well. You have got a combination of factors. Mark do you want to comment on that and the Civil question?

Mark Morris: In terms of the cash flow, as I covered on Friday, about 200 was due to lower revenue, about 100 has come from lower deposits, just reflecting order intake and the deferrals that we are seeing with people not ordering at the time. Then the other 100 again was inventory, and that reflects this ramp up of load and that is what is stuck in the system. That was broadly the criteria that [inaudible] that up.

In terms of the Civil question I think rather than trying to go out now and talk about where is the trough and where is the inflection point, like I said, we will reflect on building that bridge that gets us from A to B. As we reflect on that we will include that certainly in one of our thoughts as to how we move forward. Again, I did guide on Friday where we saw Civil margins going for next year and the reasons behind that. I guess there was one other item obviously which was R&D capitalisation which I referred to which maybe we can we talk about just now.

John Rishton: I think what is clear to us is there is two questions associated with the Civil margin. One is the trajectory between now and the future. Is it straight? Is it down? Is it up? Where is it going? The second one is the bridge between how do you get from here to there in terms of the drivers within the business? That is how I would summarise the two primary questions that we have got around the civil margins and that is what we are reflecting on.

Jonathan Bloom (Fiduciary Management): Providing margin guidance without revenue implies that margins may not be dependent upon the company's revenue trajectory. How can investors reconcile this disconnect?

John Rishton: I think that really goes back to the first question that we had here in terms of revenue guidance that we are going to reflect on that and that is clear feedback again. The elements of feedback in my head are Civil trajectory, Civil building blocks, revenue, split Civil/non-Civil, total and cash flow relates to the two. Those are the four primary bits of feedback in terms of the level of disappointment that we are reflecting on. Some other elements as well in there but I think it is within that. It is the same answer.

Sandy Morris (Jefferies): Going back to this cash thing, just so that I get it clear. We took at least £500 million out of our revenue guidance for 2014 – ish. Most of which must arise in the fourth quarter. It is a natural industry thing therefore we end up with too much inventory and your decision is when you take it out. Is that not just how it goes? This is a typical industrial slow down.

John Rishton: Yes. That is it. Sandy, you are exactly right.

Sandy Morris: Then at some point the cash corrects but at the cost of profit.

John Rishton: Yes. We have got a combination of factors which is as the revenue slows the lead time for the inventory continues to push through. Therefore you have got to take that out as well and, in addition, I go to the Civil one, because we have extended the life-on-wing we have been reducing the spares requirement as well, as an example. We have got a combination of factors which are headwinds that we are facing.

Sandy Morris: Then if I just be really boring before we set another rabbit off. If deposits are down £100 million I know we have always had substantial deposits because we can see it in the notes to the

accounts. I should not be panicking that £100 million reduction in deposits means a £1 billion reduction in order intake somewhere. I am assuming that we do get substantial deposits and then prepayments so it does not work quite like that arithmetically.

Mark Morris: No. No, it does not. Clearly there is a connection with order intake and deposits and clearly as we move forward certain parts of our business collect more progress payments and deposits. Typically our Marine business, our O&G business, big working capital comes through. It comes through in all the businesses but much more on those two businesses and in particular our energy business in this particular case that has been affected by the downturn in the markets. It is slowing orders down. No doubt there will be some element due to the fact that of the transitioning arrangement of our energy business can generally put some dampeners on ability to secure the business. The transitioning effects make people go into 'wait and see' mode. There is an element of that as well.

John Rishton: Yes.

Sandy Morris: We have seen it before. Just two quick things. From June, just when we are doing our models, in the absence of revenue guidance and everything, it is plain that an unlinked delivery generates much less revenue or less revenue than a linked delivery. We just have to work round that in our models, yes?

Mark Morris: That is correct, yes.

Sandy Morris: Then the second bit just was if we do not take a profit on an unlinked engine presumably there is more profit in the after-market revenues when we are doing our models as well, yes?

Mark Morris: Yes, of course there is because what is happening in a normal link contract, if we go back to what we were talking about in June, is in affect there is an averaging going on on a linked contract which is OE much lower margin, after-market higher margin. It effectively balances the two and this is obviously what builds up the debtor. On an unlinked contract of course what we do is if there is any REC or CAR to be booked contracted out after-market it is put on the balance sheet. The after-market is at the margins of the after-market. Again, because it is a forecast and these contracts are 10-15 years sometimes there will be an estimation and a valuation risk analysis part. However, generally on an unlinked total care contract you do not get such big movements in the trade debtor and creditor build up. They track much closer to each other.

Andrew Chambers (Cantor Fitzgerald): I have got two questions, please. I do not know if this has been answered and I have just missed it. Is there any way you can split the cash flow shortfall for the current year between Aerospace and Land & Sea just as a guide to which divisions really did the damage?

John Rishton: You have not missed it in anything and we have not broken it, no.

Andrew Chambers: Would you like to?

John Rishton: No, not now, no.

Andrew Chambers: Okay. The second one was just we are quite a long way into your part-ownership at least of Tognum, and certainly you are now, I believe, in full control of it. Can you just maybe talk about where you are in terms of integration plans, because I would have thought with the amount of time you have had with the business you would have been very well advanced at the time you took full control. Yet we still have not heard anything really meaningful about what you intend to do now you intend to take cost out. Indeed I understand the business is changing a bit in the short term and maybe you have to tweak that a bit. Do you have a well-established plan to actually take significant cost out of that business now you have full control or does it remain a fairly autonomous situation as it was historically?

John Rishton: Ulrich Dohle, the CEO of our Power Systems business, formally called Tognum, will talk a little bit about that tomorrow, about where we are and what is going on. We see significant revenue and cost benefits of that. This is more an internal point than an external point, which is I do not think we are taking huge costs out of Tognum as such but I think out of the combined business we see opportunities to reduce our costs. Lawrie and the team are working on that. It is something we are absolutely all over.

Mark, do you want to add to that?

Mark Morris: The only thing I would say is that obviously it has been a joint venture until September. Our ability to start extracting much more of the cost synergies have only come on when you get full ownership. The clock has started ticking and absolutely we have got clear plans on how we integrate, get costs out and improve the revenue synergy opportunities, certainly.

John Rishton: I think the teams are working much more closely together now. I think we see some evidence of that and we will go and have a visit to there next year. The only other observation I would make is we have got distinct businesses, but if you look at the Power Systems business the Marine business that we have they fit very, very nicely together. We are already getting benefits in terms of the B33:45 that I talked about. The help that Ulrich's engineers gave us in developing that was extremely useful and we will get benefits about that. We can talk about that just a little bit tomorrow but we will talk more about that certainly in the future.

Zafar Khan (Société Générale): You have kindly given the profit profile for linked and unlinked and I think most of us understand that. Could you please do that on the cash phasing as well between a linked contract and an unlinked contract in terms of how the cash comes in over the life of these two?

Mark Morris: On a linked contract the cash is the cash. It does not get affected by the accounting. Obviously engine itself, just think about where the cash flows are going. You have got engine flying hours and obviously the sale of the original equipment. We get cash from selling the engine and we get cash for every flying hour which generally is billed monthly. In effect we make a cost accrual and then eventually we spend some cash on shop visits. Those are the cash moving pieces effectively and the difference obviously is the cash margin at the end of the day.

Zafar Khan: In effect the TCP accounting the cash flow in that is much better than time and material in that sense because if you are –

Mark Morris: Again, if you park the accounting for a second, what we have always liked about the contracts or total care is that the economics give a couple of benefits both to us and we believe to our airlines. Looking at the penetration we have had suggests that they agree with us. That is, they know how much it costs them to fly for every hour they operated and we on the other hand know that we are receiving a certain amount per hour which is billed every month. Then effectively once or twice a year there is a square up against actual hours flown. It gives us a much better cash profile in terms of rather than waiting for time and material which may be three, four, five years, cash is coming in every month effectively.

Zafar Khan: Having clarified that if I then look back and read your statement from Friday, John you said that the OE deliveries accelerating relative to the after-market has an impact on cash flow. Mark is just explaining to me that actually you are being paid by the hour after you have received the initial cash for the delivery. How does that make sense? I do not understand how this reconciles with what was said on Friday.

Mark Morris: Again, there is lots of moving parts to cash.

John Rishton: I think, Mark, for me it is the shift in the balance so the issue is with the OE growing strongly the cash [inaudible] and the way that we account for that you get a different profile. As the OE levels off

you are getting a change in the dynamics associated with the actual cash [inaudible]. In other words, the after-market is becoming more and more significant in that versus the OE.

Zafar Khan: That is when you are doing time and material. You are getting money paid when the lump when you supply the spare. In the accounting that you are doing which is 90% off your deliveries the cash profile is based on the flying hours, as Mark has just explained to me. Where does the OE come in to this? You have moved the cash profile in TCP quite significantly from what it was in the time and material. Time and material you deliver the engine, you get a lump sum. Now you are doing that with the TCP as well but then you are only getting cash when you deliver the spares. Engine comes off the wing seven years' time, six years, maybe eight years now because they live longer on the wing. You are getting those lumps coming in under that but under the new accounting and the cash that you just explained to me you are getting cash on the hours flown. I do not understand where the OE and the after-market in that scenario has that kind of adverse impact on cash.

Mark Morris: Okay, let us go back. First of all, OE makes much lower margins and certainly in launch phases can be and will be a loss, because you have got the learner curve. I am talking cash. Hang on.

John Rishton: It is the conversion percentage that we are talking, not the cash flow. As the weight of the after-market and the profitability improves and the margin improves, driven by the shift of the mix and the cash conversion, the percentage changes. Can I suggest that maybe Mark talks to you a little bit about that afterwards specifically because we could go through that in some detail?

Sash Tusa (Edison Research): I would just like to come back to Andy's question on Tognum, now Power Systems. It was quite noticeable in the Friday segment that that was the one business that actually you brought guidance down for both 2014 and 2015. Mark just mentioned that you have only taken control of it in September, having initially invested three and a half plus years ago. I wondered whether you could just give us some sort of assurance that the period of limbo that Tognum lived in between your initial investment and buying out has not actually caused the business to drift and therefore to have quite a shock when you have finally consolidated it? Secondly, could you possibly give us some assurance that you will not do another joint venture that takes quite so long between the initial heavy investment and actually starting to manage the business?

John Rishton: The business has not drifted. I think the market environment has been unhelpful, put it that way. If you looked at the primary competitors – you look at Caterpillar, you look at Cummins, you look at Man – the environment has not been conducive to the kind of progress that we would have liked to have seen.

In terms of assurance about the future joint ventures, certainly the Tognum joint venture was one that was a challenge from the start in the sense of it took a long time for the minority squeeze out to take place. Across the business, joint ventures in our industry are more prevalent than in many other industries and have been pretty successful with varying degrees. I am not going to rule out doing joint ventures but I do not want to go through the pain and grief that we went through with some of the joint ventures that we go through. We have learnt things but there are joint ventures that have worked and do work very well for us.

Celine Fornaro (Bank of America Merrill Lynch): I would like to know what assumptions on Capex and R&D have been made to establish the mid-term guidance, a trend, either in absolute or as a percentage of sales?

Mark Morris: Again, as we covered in our June Investor Day, we talked about R&D being around about 5% and trending lower as we got the benefit of leverage and increased volume. On capex we are talking about driving it towards 4% of sales. Again, no change from what we said. That will not happen necessarily in the space of a year as we talk over the medium term. Of course, in any one year sometimes they will go up or down slightly. However, the general trend is where we are heading on this.

Celine Fornaro: Will there be big volatility in those assumptions if there is a launch of a new engine programme?

Mark Morris: Let me just answer that in two parts. Let me start with R&D first. When we think about R&D we are always thinking about how we utilise our engineers because that is generally where the bulk of the R&D is spent. They are looking at current. There will be a section looking at research and technology. There will be those that are working on programme upgrades. There will be those that are working on unit cost. There will be those that are working on potential new programmes. What we look at is, as we go over time, the load capacity balances I referred to will change, and it frees up engineers. Of course, within that affordability we figure out whether we can do new programmes. Then the question is does the programme come along or not or two programmes come along? We take the decision as to which ones we are going to be on or not. Do not expect you will see massive bumps up in R&D. Generally it will float around the 5%. It may be a little either side of that, but that is driven mainly by our load capacity balance. We cannot just double the numbers of engineers and build aircraft engines.

On capex it really depends on where we are and it is a step curve. It is what is it we can do with the capacity that we have? We have invested a lot in capacity and you just heard John talk a little bit about the fact that we have excess capacity and how we make that more efficient, which we are focused very heavily on at the moment. Again, we have been expanding for rising load as well at our newer factory. To the extent it can be covered off, then capex generally will fall within those bounds. Capex is driven in our new programmes, primarily by things like new tooling and, of course, in any given year that will oscillate around. Again, I would not see significant movements in capex.

Speaker: Presumably life-on-wing should not be a big surprise. It has been on the wing for a while. What has caused it to suddenly get longer? I am presuming it is something you did five or six or seven or eight years ago. How much longer has it got?

Mark Morris: Life-on-wing, we are always looking to try and improve the reliability of our products. It happens at two levels. One, the longer we can keep them on the wing obviously the less number of overhauls. However, also when they come in, the amount of cost that we have put on those overhauls. A lot of work is going on. Again, when we talk about unit cost engineers, it is about looking at finding parts and ways for keeping the engine on-wing for longer, improving the reliability. That can be by parts that have longer lives. It can be by how the engines are operated. It is not just life-on-wing. I think we need to be careful. Life-on-wing is one way of extending and reducing cost. The other way is of course making sure the work scope is accurate and that we are sweating all the assets. Do not just assume that the only way that you get reliability is increasing life-on-wing. Sometimes it is an appropriate time to take engines off wing to get the perfect cross over between costs of overhaul and too much extension. There is some quite complicated dynamics that go on about what type of materials you use. However, in general what we are trying to do is to sweat our assets, which is make sure that every component is burnt down to the end of its life; that we only scope the engines where they need to be and we pull them off at the right time, utilising the wide array of shops that we have. That is what is driving cost down or cost improvements on life cycle cost along with obviously just making parts cheaper and last for longer.

Olivier Brochet (Credit Suisse): On Defence if I may please. You said that you are well into your cost cutting on this side and that you have made good progress. Can you just tell us how much remains to be done and can be done in Defence before you have reached the level of costs that you can be comfortable with? The second part is on the V-22 engine, just to try to understand what is going on there with the DOD, I think, put an RFP for a replacement engine. How comfortable are we that you are not going to lose this platform?

John Rishton: Based on my experience, I do not think you get to a point when you run out of cost ideas. There are things that you can always do and we will look at them. A significant part of the Defence

engineering cost reductions have been associated with productivity, labour performance and we have taken out quite significant amounts of headcount over the years to reflect the balance. Getting that balance right as well as working on the productivity, the improvements in terms of the materials that we use. How do we make them last longer? I would always argue, and certainly the Defence guys are not pushing back, there is more to do and more that can be done.

In terms of V-22 we have been asked to re-bid by the DOD. We are not alone in being asked to do that. This is part of the pressure that is being exerted by all the Defence agencies, particularly the US and probably in Europe in terms of can they get better deals? In terms of the V-22 that was a programme that has had a difficult birth but which the customers are now very satisfied with. The positive part of the story is that our customers are very pleased with the performance of the product, whether that is the end customers or the manufacturer. We will be competitive in that area and we are determined not to lose that product.

[END OF TRANSCRIPT]



Rolls-Royce

Marine Capital Markets Day Presentation

Tuesday 21st October 2014

Speakers:

Lawrie Haynes, President – Land & Sea

Dr Ulrich Dohle, President – Power Systems

Mikael Makinen, President – Marine

John Knudsen, President Commercial Marine

Sauli Eloranta, Executive Vice President, Marine Engineering & Technology

Mark Alflatt, Finance Director – Marine

Welcome and Agenda

Simon Goodson

Director of Investor Relations, Rolls-Royce

Welcome

Good morning everybody. Welcome again to Ålesund and welcome to everybody joining us by live webcast for the Rolls-Royce Marine Capital Markets Day 2014.

Safe harbour statement

Just before we start some safe harbour language. As always, you will see and hear forward-looking statements during the course of today. Please remember that they are based on the management team's current view of life and of course those assumptions can change over time.

Agenda

Let us have a very quick run through the agenda for today before we get straight to it. Lawrie Haynes, President of Land and Sea, previously Marine and Industrial Power Systems; we had lots of good feedback about that name so we have renamed it Land and Sea. Lawrie will present for half an hour as an introduction to Land and Sea, together with Ulrich Dohle, the CEO of our Power Systems business, who will just give a short piece about Power Systems.

Remember all the times in the agenda are UK plus one hour. At 08.30, Mikael Mäkinen, the President of our Marine business will talk for 45 minutes about the Marine business. We will then have three separate sessions of 30 minutes in length. John Knudsen, President of the Commercial Marine business will have a focus session on customers; we will have a coffee break for half an hour at 10.00 before Sauli Eloranta, our EVP for Engineering and Technology will present on innovation; and then the final half-an-hour slot will be Mark Alflatt, the Finance Director for the Marine business, on profitable growth. We will then leave it to Mikael Mäkinen for a brief wrap-up before we get to QandA.

Submitting questions from the webcast

For everybody on the webcast, remember you may ask questions via the webcast; we will make sure that Lawrie, who is hosting the QandA, will receive those questions before the webcast closes at 12.30. At that point we will give a separate brief to those that are staying for the afternoon in terms of what goes on for the tour of the training facility in Ålesund, in which we are in, but also of Island Pride, a platform supply vessel.

So, without any further ado I will hand over to Lawrie Haynes, President of Land and Sea.

Introduction to Land and Sea

Lawrie Haynes

President of Land and Sea, Rolls-Royce

Preamble

Thanks very much Simon. Good morning everybody and good morning to everybody on the webcast. What I would like to do is briefly introduce myself and then I am going to give you a quick view of the three businesses that make up Land and Sea and give you some assessment on my view on where the market is going to be in the medium term.

Introduction

So, firstly, as Simon mentioned, I joined Rolls-Royce about six years ago. I joined to head up the Nuclear business, then John Rishton asked me if I would also pick up the Marine business portfolio. After that, earlier this year, he asked me to pick up what was MIPS (Marine Industrial Power) which, as we say, is now

Land and Sea to develop this business, particularly on the occasion of acquiring 100% control of Rolls-Royce Power Systems.

I will talk a lot more about Power Systems in my little piece. However, it is a very important acquisition that we have made and I will give you various threads of opportunity that we see as the new owners of Rolls-Royce Power Systems. There are good opportunities; good synergies; good opportunities to develop innovation, etc.

Privileged to run Land and Sea

I am very privileged to run Land and Sea. We have, in my view, exceptional people; we have world-class people and you will see some of them today. We have world-class products and you will see some today. We have a very strong position in innovation and technology; a world-beating position, actually, in innovation and technology. I think we recognise that over the last two to three years there have been kind of difficulties in the Marine market, there have been headwinds. We recognise that, but what I am enthused about is the medium-term and long-term opportunity for the Land and Sea business, the Marine business and the Power Systems business that Dr. Dohle runs.

Deep foundations

Where I think we are is that we have, in Marine, in Nuclear and in Power Systems, extremely deep foundations. You cannot have a business for the future if you do not have deep foundations and deep knowledge and deep experience and an understanding, a deep understanding, of what your customers want and need; we have that.

You will probably think, 'What are the barriers to entry?' Well, one of the soft barriers to entry is that knowledge, that experience and that detail; we have that in spades. I think that my real view about the position on Power Systems is that it has only been since we have taken full control that we have really gone into that business in detail to start to dig up some of the golden nuggets that are in there and identify some of the key options that we have to develop that business. I think it is therefore very worthwhile having five minutes, ten minutes with Ulrich to give you a kind of insight into that business itself.

Mega trends drive growth

What I would like to do now is quickly go through a couple of slides on the drivers. This, the first one, you saw John Rishton give last night so I will not spend very much time on this; John talked about this yesterday. However, one of the key things here are these mega-trends; they will drive growth across this business.

Population growth

There are more people on the Earth, or going to be more people, needing more resources, including power, against a backdrop of ever-tightening environmental legislation.

Growth of the middle class

I think one of the key points that John mentioned yesterday was the development and the growth of the middle class. John mentioned 100 million-plus new people entering the middle class every year. Very simply, what that means is that if you are an emerging economy you have moved from bike to motorbike, from motorbike to car, into urban towns and cities, which drives construction; it drives road transport, rail transport and 90% of all goods are transported by the sea, so it drives sea transport too. Therefore, do not underestimate that these mega trends are just figures; they are influencing our strategic thinking and our strategic development.

Environmental regulation

The other areas that is developing our thinking, of course, are things like the IMO regulations, emission control, etc. I think you could probably personally look around if you travelled by sea at the amount of pollution that is there, but also the amount of pollution that comes from maritime vessels.

The IMO is now getting teeth and getting something about it. Why is that important? Well, because we are very, very good at emissions control: in fact, we are ahead of the regulators and we are ahead of the market. It therefore places us in a really, really good position as we go forward into the next few years.

Rolls-Royce's lower-emissions technologies

Why are we, Rolls-Royce, positioned to deal with that? Well, we are positioned because we have three fabulous businesses. Mikael Mäkinen is going to talk about the Marine business so I will not deal with that here. However, let me give you one or two examples that Ulrich will not have the time to deliver; I will just give you a taster.

We have developed hybrid power-packs for Deutsche Bahn; the first hybrid power-packs are now being tested on the German rail network. These are diesel-electric, the equivalent of the Formula One KERS system; we are developing that and have developed it and we have product now on the marketplace. There is global potential in this area.

We are developing lean gas-burn technology which greatly reduces emissions. We are ahead of the regulatory requirements and we continue to invest in new products in this area. In L'Orange we have fuel injectors that are state-of-the-art; they are the best in the world. If you imagine 20, 30 years ago with your own car and now imagine trying to do some work on your own car, it is impossible because everything is computer-driven down to the smallest micron. Our fuel injectors are state-of-the-art; they are the future of reciprocating engines. We also, with Power Systems, have a fabulous range of high-speed diesel engines, both for Marine, for the off-highway market and for land power. We are therefore extremely well-positioned to take account of these mega trends.

Growth of nuclear

Now looking at Nuclear, if you just think about the nuclear market there are today about 440 reactors operating in the world; the projections are, from the various authorities, that there will be between 160 and 170 new reactors built over the next 20 years. If you add together those reactors being built, the reactors operating that need servicing and maintenance, the decommissioning market, the fuel market, you are adding up to a total global market of about £1.6 trillion over the next 20 years.

Now, Rolls-Royce is fabulously positioned to take account of that market. We have over 50 years' experience in building nuclear reactors; designing them for the Royal Navy: we operate nuclear reactors; we understand them, so we are in a nice position to take account of that. We have about 600 people in France, in Grenoble, who operate the instrumentation control systems for nuclear reactors around the world; the INC system is basically the brains of the reactor. We understand nuclear technology.

Land and Sea within the Rolls-Royce group*Fully integrated*

I now want to give you a quick picture. I think you saw this with John Rishton in June; it is a graphic about what Rolls-Royce is about and Land and Sea is fully integrated into the group. Across Rolls-Royce we focus and deal in engineering excellence; complex Power Systems that are becoming more and more complex, that lead to a greater aftermarket opportunity. To be in these markets you have to innovate; you have to spend money on research and development; you have to spend money on technology; you have to constantly learn.

Access to Rolls-Royce's learning system

One of the things that we, in Land and Sea, have as a great advantage over our competitors is that Rolls-Royce has the most remarkable university technology system, learning system for engineers and advanced manufacturing research centres that are, again, second to none. In Land and Sea, therefore, we benefit hugely from being part of the group and taking advantage of these engineering skills.

Sales pull-through in Marine

One of the things that I would just like to pick out from this slide is we talk about the reciprocating engines and the nuclear reactors at the power level. However, we also have expertise, of course, in gas turbine engines, which sell into our naval market. Selling engines is a direct pull-through for our deck machinery and our propulsion systems in Marine. Having the engine, having the deck machinery, having the equipment that is supplied for the payload gives us the opportunity, which my colleagues will take you through later on, to then be able to sell integrated offerings.

Selling integrated solutions

However, selling integrated solutions to our customers is not easy. You have to be very good to be able to integrate a series of components and products into subsystems and then into systems. We are good at it; people watch what we do and follow us.

Land and Sea's people

We have about 22,000 people in Land and Sea; we have about 6,000 engineers and we have, as I described earlier, a completely intimate knowledge of what our customers want and need going forward.

Land and Sea's strategic priorities

I just want to talk very briefly now about the Land and Sea strategy. It is, of course, fully integrated within the Rolls-Royce Group. I am not going to talk about the top, the customer innovation and profitable growth, because John Knudsen, Sauli Eloranta and Mark Alflatt are going to address those. However, let me just talk about what my priorities are.

Leadership in reciprocating engines

You can see the first one there: leadership in reciprocating engines. Well, it is great that we now have control of Rolls-Royce Power Systems because that gives us that leadership. I am sure you will look forward to going to Friedrichshafen this time next year to see some of the great technology that Rolls-Royce Power Systems has been developing actually over 100 years. We are a leader in high-speed reciprocating engines and it is a key offering for a number of the systems going forward. For me it is a key priority that we, firstly, protect our position in high-speed diesel and then grow it. And growing it means getting out to more markets, working in partnerships with a number of companies around the world, but it also means continuing the research and development effort that Power Systems has put in over the last decade. Ulrich will talk about that; we continue to invest in this technology.

Develop the range of medium-speed diesels

In our medium-speed diesels if you look at the overall market positions we are probably at about 5% in our overall market position in the offshore world and the merchant world. We have, as John mentioned yesterday, developed the new Bergen 3345 engine. One of the real reasons behind that was simply to protect our offshore position, which we are very powerful in. However, the 3345 also gives us the opportunity gives us the opportunity to develop into the short sea and the tug market, so it is a progression: an organic progression in medium-speed diesels.

That is my policy and my strategy: we will continue to develop our medium-speed diesels through organic growth and through partnerships with companies, particularly in the Far East that will have routes to market that we currently do not have.

We are looking to develop the range of medium-speed diesels; we are looking to develop the cylinder configurations: more cylinders, more power per cylinder and different fuel types, because that is what our customers need. And as I say, we are looking for new partners around the world.

Development of deck machinery and propulsion systems

In terms of the deck machinery and propulsion systems, we have, again, a very strong position in a number of the propulsion markets, for example the thruster market; I think you will probably see one of these this afternoon. Thrusters, water jets, propellers, different types of anchor-handling equipment, winches are very important payload requirements that our customers need; that is the stuff that drives their money and we are in a very strong position. Having the engine, whether it is high-speed or medium-speed, drives the proposition to our customers that they would like to stay with Rolls-Royce and develop with us.

Enablers

Continuous improvement

If I now look at the enablers, the first one is continuous improvement. Over the last two years we have embarked on a massive campaign to improve our delivery; frankly, two or three years ago we were underperforming. At the beginning of 2012 we were delivering on time about 30% of our original equipment, at the beginning of last year it was about 55%, this year it is about 92%. We are therefore seeing a considerable improvement in our day-to-day delivery, our responsiveness to our customers. John Rishton has pushed the 'four Cs', we understand it, we get it.

In terms of the next couple of years, I can tell you that 92% does not do it for me. Mikael Mäkinen and the team know, therefore, that I am demanding more and will continue to demand more on behalf of my customers; that is the position that Rolls-Royce is developing.

Integration of Rolls-Royce Power Systems

I think if I now look at Rolls-Royce Power Systems and the integration, we have, as I say, created a position of 100% ownership. We now have an integration team fully enabled and pushing forward very hard, and I will give you some examples in a few minutes on where we see opportunities in Power Systems' accelerated integration.

Capital Allocation

In terms of capital allocation, again we are looking at this. We can now look across the whole of Land and Sea, pool the appropriate resources that we have – capital etc. – obviously working with Mark Morrison and team to have a prioritised approach to capital allocation.

Customer satisfaction

On issues like customer satisfaction, one of the things that Power Systems can pick up from Rolls-Royce Marine is that Rolls-Royce Marine has developed a clear account management approach. This has been very highly regarded by our customers, where one executive is responsible for the key customer and therefore can take decisions on their behalf. This is driving customer satisfaction very positively and working with Ulrich and his team we will be developing that in Power Systems.

Geographic reach

Lastly, in terms of geographic reach, we have, over the next two to three years, the opportunity to look at our services business. We have a very wide geographic reach and we will continue to develop that approach more openly.

So Power Systems, with Rolls-Royce Marine gives us scale and scope.

Cost

Lastly, on the four Cs, I will talk about cost. Over the last two years we have been very proactive in terms of addressing our cost base. When you are in a position of headwind problems, as John said yesterday, you have got to address, your cost base.

Indirect head count

Over the last two years, we have been closing, or in consultation to close, about ten facilities around the world, particularly in the high cost areas. We have reduced our indirect head count in Marine by about 500, which is about 20%. In Power Systems, about 400 indirect people have left or are leaving the organisation.

Supply chain

Our supply chain had 1400 suppliers in 2009; today it is 900 and we are planning to reduce that by 20% by 2016.

So there is a great deal of activity on cost and cost savings.

Land and Sea Today

Now moving on to Land and Sea today, I will not talk to the Marine or the Power Systems parts of this slide because Mikael and Ulrich will address this. Nuclear, I mentioned, has deep roots. There are some very clear threads that string across those three businesses: high technology; research and development; knowledge and experience of new product introduction; safety critical components and system integration; project management; advanced manufacturing; and, of course, deep customer knowledge and care. Those are the threads that bring these businesses together.

Creating Value

Marine Systems

In terms of creating value, I talked about the integration of Power Systems into Rolls-Royce and Rolls-Royce, actually, into Power Systems. We see really clear opportunities. In this connection, let me give a few examples. The Type 26 vessel: MTU is now specified as a standard engine for that vessel; it was not before. The UT vessel: 40 years old. Rolls-Royce as the ship designer for the MTU vessel used to specify engines other than MTU, other than Power Systems' engines; they now specify MTU engines, which gives a big opportunity.

With the integration of Power Systems, I just want to give you a little personal view that I met with a very senior Admiral at the naming ceremony of the new Queen Elizabeth class aircraft carrier. He said, 'Lawrie, we are just delighted that you have acquired Rolls-Royce Power Systems because now you can start to give us an integrated offering where you are pulling together MTU engines, Bergen engines, gas turbine engines and DET machinery and power sources and power trends.

We are very pleased to think that we can get one integrated offering from you.

Services

On services, we see the real opportunity of exchanging service engineers. We are now doing it product by product but we will increasingly look at the distributive network reach and through training, will take the opportunity to expand our geographic reach into services. In L'Orange, the pre-eminent technology is now linking into our ship design systems. The Rolls-Royce lean manufacturing systems are now coming through very strongly, particularly into the diesel market.

Nuclear

In nuclear, Rolls-Royce Power Systems has got emergency diesel generators. Rolls-Royce Nuclear has the route to market; a very clear opportunity for us to cross-sell.

Back office rationalisation

We have also got back office rationalisation and we are looking at purchasing opportunities now across a larger group. The message is simple: many opportunities and we are now very actively addressing them.

Land and Sea Revenue

Land and Sea is material to the group; 41% of revenue. Power Systems was, and is, an important acquisition. We have a large number of staff, with 6,000 qualified engineers. We are in a very strong position to build a future.

Summary

In summary, I want to be very clear. We have recognised the short-term market issues. We have recognised the headwinds that we have had over the last two or three years and we are doing something about it in terms of cost. We are also looking at the acquisition of Rolls-Royce Power Systems as a real opportunity. The business does have a long-term growth opportunity based upon the mega-trends and our position and portfolio. Land and Sea is significant as a player in this market place and in the medium term.

Introduction to Power Systems

Ulrich Dohle

Chief Executive Officer, Rolls-Royce Power Systems AG

Introduction

Let me introduce myself. I have worked with Rolls-Royce Power Systems for five years, serving on the Board of Management. For the first four years, I was in charge of technology and operations and for 18 months, I have been the CEO of the company.

Power Systems

History

The company was founded in 1909 so has had 105 years of technology development. It was founded by the Maybach family – father and son – and the event that triggered the foundation of the company was a disastrous thunderstorm in 1908 when one of Count Zeppelin's airships crashed in Echterdingen which is now Stuttgart airport. It crashed because the engines failed in the thunderstorm and the airship caught alight. Then the German people collected money; they had 2 million Goldmarks to give to Count Zeppelin so he could restart his business and he decided to design new, reliable engines that we are still proud of designing today. So our technology goes a long way back.

In those days it was still gasoline technology; in the 1930's, it turned into diesel technology because diesel injection equipment was made available. In 1933, L'Orange was founded, our daughter company. With this technology, it was possible to employ diesel engines into mobile applications. These days, the diesel engine is basically 'on the run' and in 1932, the first high speed train was developed in Germany, running from Berlin to Hamburg. It was called *The Flying Hamburger* – nothing to do with McDonalds – which did 160 kilometers per hour, which is still a record for a high speed diesel engine using turbo chargers designed and made by Maybach. As of today, we still design and produce our own turbo chargers which are a distinguishing technology, along with injection systems. This is where we differentiate ourselves from our competitors.

Our brands

The technology is in our genes and, today, we are carrying our strong brands. We are known for MTU with our customers – MTU engines; MTU Onsite Energy; Power generation; L'Orange and Bergen Engines. This is something we will continue to develop and continue to progress.

Products

We are not only selling engines, we are providing propulsion systems, including gear boxes and diesel electric combinations in many different ways. In Marine, for example, we do combinations of diesel engines with gas turbines. The longest mega-yacht we have just launched is 185 metres – a cruiser starts at 200 metres – has a holding space for 36 people plus 120 servants and personnel. This is powered by two 8,000 series MTU engines of 10 megawatts each, plus two gas turbines – unluckily, not Rolls-Royce but we are working on that. The combination of the automation systems is done by us. It propels a boat like that close to 48 knots, which is close to 75 or 80 kilometres per hour. It is tremendous what a boat like that can do.

We have many, many different applications, all of which I cannot go through. Lawrie mentioned the hybrid train that we just developed and that is installed in the first prototype. It is a full-fledged hybrid; it is a diesel engine, 380 kW and an electric motor, 340 kW. All the electrics and electronics are designed by us in combination with capable suppliers. This setup, together with the lithium ion battery pack, helps to save 19% of fuel. It is a full hybrid recuperating break-in engine suburban train that stops every five minutes. The train weighs about 60 tons. All the energy that is normally wasted is being generated into power and is stored in the battery. It is actually a really good energy saver. That is something we are very proud of. In power generation we have developed not only diesel, but also gas engines and we are going to continue to develop gas engines also for mobile propulsion, like for ships.

Portfolio and applications

Energy solutions

With this I would like to come to our second entity, that is energy solutions which is for medium speed engines out of Bergen, plus our nuclear piece which is more or less emergency diesel engines for our nuclear power plants. I was talking about gas engines, which is something we can be really proud of. Gas engines are being produced in Bergen and they are world-class in terms of efficiency and fuel consumption. Something we are currently learning from Tognum is how to make good gas engines; they were the first ones to apply gas engines into ships and ferries starting in 2006 and they are really brilliant engines.

L'Orange

The last one that was already mentioned is L'Orange. It is a company that we acquired in 1985. It was founded in 1933. It is a specialist supplier expert in diesel injection systems, but also in gas injection components now, liquid natural gas or compressed natural gas. The latest technology that we have on our latest generation of 3,000–4,000 engine injection system from L'Orange is common-rail system with 2,500 bar, which really is a front-runner in the industry. For this one can only use certain special steel, which is supplied not even by a handful of suppliers world-wide. The design of these injectors is extremely difficult; 2500 bar, that means a water column of 25 kilometres in the air, twice the height a plane flying intercontinental. It is technology that we are very proud of and that we are continuing to develop.

2013 key figures

Allow me to finish with some numbers. We are a company of £2.8 billion in 2013, employing above 11,000 people worldwide. We have a service network, which is spread all over the planet with more than 200 service stations, distributors, etc., so we are everywhere where engines are being used. There is somewhere where we can find synergies and we do find synergies together with the Marine business, doing service for components and ships. We are doing about one-third in service; the rest is 70% in OE. Marine

is one-third of Power Systems, this is important to know, 25% or nearly one-third is Energy and the rest is industrial, rail, mining trucks, harvesters and defence, all the different applications, are a very small portion and 'others' is also L'Orange. The distribution of our people is such that the majority are still employed in Germany, but we are moving more and more into other regions. We have started an engineering developing centre in India four years ago, we are building a strong entity also in the US for development and we are constantly developing our footprint in manufacturing. With this I would like to conclude that we have had strong technology in the past and we will have strong technology in the future. Thank you very much.

Introduction to Marine

Mikael Mäkinen

President - Marine, Rolls-Royce Power Systems AG

Introduction

Good morning everybody, my name is Michael Mäkinen and I will talk about Marine. Being a new member of Rolls-Royce, myself, I will say a few words about my background. As you might guess I am a naval architect, I have more than 30 years of experience in the marine market. Before joining Rolls-Royce five months ago, I spent most of my career at Wärtsilä where I was the deputy CEO in charge of the Marine business as well as developing and implementing the strategy for Wärtsilä in Asia. After Wärtsilä I joined a Finnish stock-listed company Cargotec as CEO and then I joined Rolls-Royce five months ago.

Rolls-Royce

How did I see Rolls-Royce when I worked at Wärtsilä or Cargotec? What did I feel were the strengths and weaknesses of this company? Of course it is a very strong brand, strong engineering with real will to be a winner and to grow. That is what I saw from the outside. However, I also saw a company that was not agile enough to understand the market. I also saw a company that was not a player in Asia. I also saw a company that was not as customer-focused as they should be. If I then thought about the market in general, I felt and I feel now that the market is now going through a very big change. The marine market is going through a big change. It is a conservative market, but there will be changes. One of the changes will be a consolidation of those companies who are going to understand what is the strategy and who are the customers. I felt that Rolls-Royce could be one of these companies and that is why I joined. I am 100% sure that we can be one of the winners here.

Introduction to Marine

Let us have a look at how we see the market. I am going to talk about marine in general, then I will talk about Rolls-Royce Marine and then what is our approach and strategy. For those of you who know the marine industry very well, some of this information might be very basic. I think it is extremely important that we create a baseline and based on that we can have discussions in future meetings that you have with Simon and Mark. So let us create a baseline.

Rolls-Royce Marine

Why do I think that Rolls-Royce Marine belongs to the company, to the group? I think that Rolls-Royce hits home with this advanced engineering, with all the tools and skills that you find in the group. Let us take a few examples. We can start profiting from data analytics equipment monitoring from Aero. Asset management is very well taken care of in nuclear and we just heard about Power Systems, cross selling, L'Orange, injection equipment, markets where we are working together, where we can learn from their engineering.

This is very interesting, but what does Marine bring to the group? A very different business cycle, it is shorter; a totally different type of investment profile; it is a smaller investment with quicker payback; a

different type of cash generation. I think this creates a more balanced Rolls-Royce, with us being part of Land and Sea. During my presentation, which is mainly on the general level about Marine, do not misunderstand me. In my previous companies I have done very big restructuring and I know the headwinds that we have now in the short term, this is part of my job, to drive efficiency to drive down cost, to see how we can be better and so on. This is a great opportunity to do that and we are well-positioned to do that.

Marine

Let us dive into Marine. It is a very big contributor to the world economy. There are two reasons for the whole of globalization: free-trade; containerization. The container was developed in 1960 and is actually the main contributor to our global trade. We have to remember that if we produce something in China and take it to Europe, if it is oversized it can be put into a container, then the freight cost is divided by ten. Everybody can be sure that a product that starts in a factory and ends up in a shop, it is sealed all the way. That is a huge contributor. 90% of the goods in weight and volume are transported by sea.

Off-shore exploration, as you will see in other slides, will grow. Everybody is worried about the oil price and what the oil companies are doing when they cut the EMP expenses for the coming years, but we will come back to that. Last, but not least, is naval. More than half of the countries in the world have an ocean-going navy. That is the marine industry.

Major trends

Many of these trends will be explained in more detail by Sauli when we talk about innovation, but I will quick go through them.

Environmental efficiency

You heard from John yesterday and Lawrie today and Dr. Dohle, that environmental efficiency is very important. 90% of the products transported by sea and is actually a very big part of air pollution is coming from ships today. There emission control areas in the Baltic, North Sea and North America and there will be more of them. Sauli will explain in more detail.

Ship intelligence is the new way to sell

You will see today big changes in the ship building industry. Intelligence is going into the ships. It is a new way of selling ships and taking care of your assets. Fuel diversity we talked about. Gas: the only reason we do not have more gas ships is the distribution of gas. Operators cannot get gas to the port, so they cannot have as fuel for the ships.

Electric ships and systems

More and more equipment onboard ships are being installed as electric instead of earlier hydraulic and pneumatic. Especially when you go high up north, you would never want to use hydraulic equipment onboard a ship because an oil spill in the Arctic area for a drill ship is one deciliter; that is considered a major oil spill. One deciliter could mean that just one pipe breaks on-deck of hydraulic equipment and the whole rig stops. Electric system also means that it is easier to monitor equipment, to go from an old type of ship to a new type of ship.

Markets continue shifting towards Asia

I will come back to this. First the shipyards moved, and now we see more and more ship owners are moving to Asia.

Increasing activities in harsh environments

I am talking about the northwest and northeast passage, very far up north. This means new requirements for ships and a new way of working.

Business models changing towards asset management

Traditional ship owner used to choose everything. He wanted to know how the piston works, how to change the piston, etc. The new ship owners are asset managers. They are putting in money and they are talking about systems and solutions onboard ships, who can take care of them, etc, instead of products. It is a new way of working.

Flexibility increases in ship design

Increased flexibility in the ship design, just with the new technology we can do that. Ship sizes are growing.

Ship sizes growing

1988 was a huge year because the new post-Panamax President Truman container ship started operating at 4000 containers. Last year, Emma Maersk came with 18,000 containers. Emma Maersk is already 400 metres long and 54 metres wide; it is a huge ship. Now we have the new Panama Canal coming in, which means that the Panama Canal is now 180 feet wide. This will again drive toward bigger ships.

Market segments

In my presentation I am going to talk about offshore merchant and naval. What we in Rolls-Royce call commercial is actually a combination of offshore and merchant and that is where John Knudsen is heading. Every fifth ship has Rolls-Royce equipment. There are about 130,000 ships out there. 10,000 of them are offshore, 11,000 are navy ships and the rest are merchant ships. Sometimes when you see the market share, some companies say that our market share is 20%. Is that correct? Probably not. If we look at the revenue in our addressable market, our market share is 14%. If we look at it per product, we just heard that on diesel engines maybe 5%, on some thrusters, about 60%. The market is very complex; that is why there are so many statistics for calculating the market share, which is why I am guiding you through how we look at the market.

Offshore

I will explain exploration and production; subsea and construction and supply and service in more details later. Before we go into the ship types, what is always asked is about the cycle, such as what is the cycle and where are in the cycle. I have taken two pictures of cycles here. One is supply and support vessels. You can see relatively big number of them have been ordered the previous years. Then we look at anchor handlers and we see that very few have been ordered. We see now anchor handlers coming. On the previous pages we saw different ship types. To get some kind of understanding of the cycle, we have to put all of these cycles on top of each other. We then see that the on aggregate, the market is slightly growing all the time.

Vessel types

For those of you who do not know the marine industry, here are some pictures. We have seismic vessels that actually explore the seabed, whether there is anything under it. We have real ships; real platforms; construction vessels, which is the type of vessel that you will see today; platform supply vessels, anchor handling vessels. In John's presentation you will see the typical cost or price of a ship and how we much we typically deliver per ship. He will go through that.

Oil field life-cycle

The oilfield life-cycle is 30 plus years. When we talk about short-term oil prices going up and down, it has an influence. Please remember that oil companies look at a 30-year cycle. When we say today that they cut costs, it is mainly on the first survey part where they cut costs. Some of them may wait with the production phase, which is where the big money, big cost going in. They start by surveying the seabed, which takes two months to two years. They do exploration, which is one to three years. They drill a few holes and test how much oil is there. Many of the oil companies have a number of these exploration stages

going on and then they stop them and wait for the oil price changes before they go into construction, which can take up to five years. Then they pump oil for ten to 30 years and every tenth year they do maintenance and upgrades because technology in the world is changing. That is why you see every tenth when there is a new statistic about how much offshore oil is out there, it is always the same number. How is that possible? Because technology changes and you can take more oil out of old wells. Thus, the technology-shift goes step-by-step and then new findings. Then, of course, we have decommissioning when the wells are empty. We have equipment throughout the life-cycle here.

It is all very exciting. You have to look at the cycle as a 30-year cycle. Then the big question is do we need energy? Yes we need energy. *International Energy Agency's* prediction for the next 20 years is that nothing can replace gas, oil and coal. We are talking about solar, etc., they are all still a small part of the energy balance in the world. In the same source I found a very interesting picture about 2035. What is happening here? You have production in 2012, take out the consumption and add unconventional – usually the most expensive part of exploration of oil and gas such as fracking, making oil out of coal, etc–, new natural gas, new onshore crude oil and then a big portion must come from new offshore. You can say that this is 101 at the end of the period, but a big portion still comes from offshore. Why is there offshore? It is oil companies risk-sharing, geo-politics. You have to remember that most of onshore is in the Middle East

Global EandP capex spending growth

Everybody is talking about the oil companies reducing the capex. They are actually using it from 13% growth to, according to Barclays, to 11%. Let us say it is 9%, or 8%, but it is still growth. Short-term they may stop something, but that is the way the world energy balance is working. This year the world spent about \$712 billion, it might go down next year, but it is still a big amount of money.

Proven offshore oil reserves

Where is the offshore oil and gas coming from? The picture here shows we start at 400-feet. There is a lot of oil and gas in the Middle East that is sometimes called offshore, but the water depth is 2 to 10 meters, so it is just a rig staying in water instead of land. If we look at offshore, however, these are areas that are found in very deep water and very complicated areas. It is a good market to be in.

Merchant

Let us go into merchants. I will not go through ship types. Usually I divide the ships into cargo vessels, passenger vessels and others such as fishing vessels, tugs and so on. Again, a very similar picture; I have chosen two important segments for us: short-sea cargo vessels and tugs. Tugs seem to be fairly stable. Short-sea has not had much ordering in the previous years, but we will see that coming up. On aggregate, if we add all ship types it could be quite flat in the short-term, but then it is going nicely up, as you will see in the next picture. You have to remember that when you read newspapers, they always talk about the cycles or the well-documented ships such as container ships, tankers, bulkers, they are not very important for us. We do not have expensive or big product offerings in those ship types. It is a complex market.

GDP and seaborne trade growth relationship

One question that I always get is, 'What is the relationship? What should we look at? What are the main drivers?' I found statistics from Det Norske Veritas on the relationship between GDP and seaborne trade. It is very interesting because they follow each other. Of course, one could answer that it is the GDP, but unfortunately the answer is no. First of all, we have to look at the scale. The scale is different on the left-hand side and the right-hand side.

Secondly, this is seaborne trade. This is not ordering ships. If we turn around and look at ordering ships, then it is the right picture. Contracted ships above, scrap below. About 3000 ships are being built every year and about 2000 are being scrapped. In theory, whatever happens, there should be about 2000 ships being built. Technology is changing fast, which drives scrapping and new ship types. Last week China

informed that they will give a special allowance to all Chinese ship owners who scrapped their ships and ordered new, environmentally-friendly ships from Chinese shipyards. This will have an impact on this picture. Speculation, such as when ship-building prices are going down, speculators order ships. Subsidiaries, for Korea and China, the two big ship-builders in the world, shipbuilding is an enormous employer. Millions working places, so those countries cannot afford for the shipyards to be empty. All of these mechanisms affect ship ordering. I think that this is the best picture. Out of curiosity, there are similar statistics done by Lloyds. It goes back to 1644, which is a long trend and you can see that it is going up.

Naval

I will very quickly go through the naval side. These are the ship types. Lawrie was talking about the aircraft carrier. Many different types of ship, depends on if you come from a small country like Finland then you can afford maybe a fast attack craft, but if you come from US or UK, then you can afford aircraft carriers and frigates and so on.

Global military ship market

The best picture I found about what is happening in the naval market. Everybody is talking about cuts on defence spending, but look at this picture. Jane's is the best statistic there is. It is not a huge cut. Maybe it goes from \$65 billion per year to \$60 billion per year. It is flat it is quite a good market. The cuts that you see in the newspapers are actually cuts on other parts of defence spending. One big part of defence spending is salaries. Navies are looking at how they can have ships that are more efficient and that have a smaller crew. You saw in UK when there was a debate about the second aircraft carrier, one of the admirals said that, 'It is fine, but we do not have a crew'. Even in the UK it is a problem, to find a crew. We will come back to that, regarding efficiency and remote monitoring of ships.

Large number of market players

There are a large number of players. First it looks like Aero you have equipment supplier, you have shipyards, it could be airframe, Boeing and Airbus, and you have airlines. But this is a much more fragmented market. You have a huge number of ship yards, you have a huge number of ship owners geographically dispersed working in this field, and then behind that you have oil companies, you have charters, and you have governments having their own opinions about it.

So a very fragmented market; you have to be very customer focused; you have to go in customer by customer. And you have to build and maintain appropriate relationships with all the parties here. And we have been very good on some areas and not so good on other areas.

Rolls-Royce Marine

Now I will dive into Rolls-Royce Marine, and I will start with a video so I do not have to go through all this hundreds of products. So this should be three or four minutes.

So there you saw our products, wide range, has to be serviced. You saw the fast attack craft there; it is being delivered to the Finnish marines, and my son is doing his military service and he is one of the twenty-first skippers on one of those, so I get immediate feedback from him, that, 'Why does not the water-jet work? Why does it not do this and that?' So I am going home to Finland this week and so I will get more feedback again.

Let us go into Rolls-Royce Marine. We heard about land and sea from Lawrie; we are an important part of land and sea. If you look at Rolls-Royce Marine you can see that 42% is off-shore, that is why we talk a lot about off-shore, 12% merchant, 36% services and 10% naval.

You look at the lower picture; that is where we have our employees. And you remember what I said earlier: where the market is growing? Asia. Where is the oil exploration happening? Many other parts of the

world. So are we in the right place or the wrong place? We are in the right place because we are very good with the Norwegian owners and the Norwegian ship yards.

Top ten offshore countries

Here you see the top shipyards and ship owners in off-shore. You can see that one of the top positions is Norway on both sides. I would say that this is a great starting point; we are very successful in Norway. When we do the same in the other areas it is a huge growth opportunity for us. We have the technology, we have the people. We have to look at the footprint, where you produce, where you have your engineers and sales people and so on.

You can also see why we are fairly small in merchant. 84% of the ships are built in China, Korea and Japan. We have quite a work to do, to be one of the players on the merchant side, one of the big players. Again, in my opinion, a great opportunity; I have done it before in Wärtsilä moving it from a European company to being a global company, having a big footprint in Asia. The same we did in Cargotec. Just to do it.

Major trends

Major trends: there we are strong. You saw the major trends earlier. I think that environmental efficiency – Sauli will come back to that – we are very strong there. Ship intelligence: you will see control automation today, integrated breaches and so on, health monitoring. Fuel diversity: we were the first one with a real gas engine medium speed. Asia: not that strong. Harsh environment: [inaudible] will be talking about ice conditions, okay, we are not better, not worse than anyone else.

Business model is changing, and I think this is where we are very, very good, because we understand it from Aero how you take good care of maintenance, how you load in big data. All the ship owners want to get rid of crew today. There are two problems: crew is expensive, and the quality of crew, let us say, outside Norway, is going down. No, do not laugh because Norway, that is a premium market; they use Norwegian crew. It is very expensive but very, very highly skilled. The rest of the world use crew from the Philippines, from China and so on, and technology is going up but the skill of the crew is going down. There is a huge gap; someone has to take care of it. And I see this as the same development. You remember years back all the big airplanes had a crew of three or four; there was an engineer on board looking at all kinds of meters and so on. That data has today fed to Derby where it is analysed, and the feedback is given to the captain. And the same thing will happen on board ships.

So when Sauli is talking about unmanned ships that is long away from now, but the first step to do the whole system – analytics, maintenance, preventative maintenance outside the ship – that is all coming fairly soon.

Flexibility yes, because we have our own ship design. You heard about UT design. 40 years, 800 ships. Just to remind you, it is not the same design, 40 years ago and now. So this is kind of, UT is the Mercedes of ship designs, or Rolls-Royce of ship designs.

Concentration

Then I would like to confuse you a bit more. Now we have to make choices; the market is there, we know how it is working. Now we have to make our choices: which are the products, which are the markets. We have to choose which equipment we are in. We can be global, we can be local, we can be low cost, we can be high-tech. We have to decide if we are a global company or a local company; if we are only serving in certain markets or global. We have to decide which type of ships we go into. All these choices we have made.

When you talk about the equipment, here is a picture where we are. Dark blue, those are areas where we have equipment. Some propulsion, thrusters, we have a market share of more than 60%. Some engines

on a global level 3% and so on. But you see a huge variety of products. You cannot be in all of them; you should not be in all of them.

Our market approach

So what have we chosen? We have chosen mission-critical integrated products with through-life services. Very important: what does it mean? We look only at equipment that is critical for the customer's task. Examples: Dynamic positioning system, which means that you have a lot of propulsion under the ship or the rig and then you buy a satellite, keep it in position; very, very complicated mission-critical systems. Big winches: The only reason why you have an anchor hand, that is the big winch, is so that you can do the off-shore work.

With integrated we mean not only products but they have to be part of a system. John Rishton talked yesterday about the enviroship, where you have engines, you have gear box, you have shaft line, you have alternators, you have propellers, you have rudders and so on. So it has to be an integrated system. And, in addition to that, it has to be something that creates true life support for the customers, which actually means services and lifetime support. So those are the systems that we have decided to concentrate on.

Offshore market positioning

I tried to do it on a three-dimensional figure. As I said, I am a naval architect; I have a master's degree in naval architecture and mathematics, so that is why I like this kind of picture. This is now, for off-shore, illustrative; you can always say that the dot should be there or there and so on. But, let us take the propulsion and engines; that is where you have propellers, engines, gearboxes, rudders. You can be very good on that axis, but it is not enough in today's world, but we have chosen that that is one of our important axes. We have chosen that the second important axis is electrical automation and control, because when you go to unmanned ship, when you go to complicated ships they will require automation and control. Third axis: operational functionality. Those are the winches I was talking about. They are all kind of equipment. Actually, it is the only part of the ship that is earning money. They generate revenue for the ship owner; the rest is just a platform where you should save cost.

I put in a number of competitors; the picture is totally different if you look at naval, if you look at merchant and so on. But just to give an illustration that it is not enough to be good at one axis, you have to be in this three-dimensional field. And I think that we are very well positioned to be one of the players there.

A sizeable market opportunity

94 billion OE: 14 billion for the last ten years, growing, becoming ten years. So what could we do? We can go with the flow, and we will grow from where we are today with the same rate as the market is growing.

Number two: our market share is only 14%. I just showed you that we have a lot of opportunities when we take the Norwegian success, the success that we have in hydrodynamics, global.

Last but not least we are of course developing new products – medium voltage engines, automation – and that creates a totally new market. This is how the market grows when you have a clear strategy, so I think that we have a lot of growth opportunities. Just to remind you, when we talk about R&D to go into that adjacent market, within the group frame it is not actually very big money. On a group level we take some of the capital from Aero and put it into Marine, but it is not like in Aero where they talk about billions of dollars to develop something new; here we are talking about small amounts, so you should not be afraid of that. So, increasing the market share, going with the growing market and then developing a new strategy and new products brings good growth, and keeping in mind that this market is consolidating.

Integrated Strategy

I will end by looking at our integrated strategy. You will have three more presentations: Customer, Innovation and Profitable Growth. Profitable Growth will be the third presentation and I would like to start

with that in this slide because, as I said in the beginning, short term it is about our efficiency, our footprint, how we can do things better and driving down our costs. Innovation is the real cornerstone in our strategy, and I think the real winner is the one who understands innovation and brings innovation into a conservative market. Customers; you will hear about how we really have to take care of and understand our customers.

Thank you very much. I will sum up after the other presentations, but for now I will hand over to John Knudsen who is going to talk about the customers.

Customer

John Knudsen

President, Commercial Marine

Introduction

Good morning, everyone. First of all I would like to introduce myself; my name is John Knudsen and I am Norwegian so I have some background from the district. I joined Rolls-Royce eight years ago and I have worked in telecoms and electronics; this is not a marine background but, as Mikael said earlier, China and the Far East are very important and that gives me some of the background for how to look into other regions as well.

Then I joined Bergen Engines as president of the business; you have heard today that we are doing gas engines in the marine side, but we have done gas engines on the land side since early 1990. We have also heard today about Land and Sea, and how you can combine the different areas is of importance. This year I joined the offshore business and, later this year, we also decided that we need to look into the cost side as well, looking at how we can bundle together both the merchant side and the offshore side. If I can be open, I was a little bit surprised that there were so many directors in the company, so one of my first cuts was to reduce the top-heavy layers. However, to be very clear, my key responsibility is sales and bringing in contracts; I believe that is the fun part of business.

Today I will talk about the merchant part, the offshore part, and a little bit about the navel part; I will also try to explain the importance of the aftermarket. This vessel here is 168 metres long; I will go into the details later, but if you have one day out of hire then that is costly. A typical hire for this vessel is £50,000 a day; if that is two, three or four days out of hire then you really want to have a global responsive aftermarket for this matter.

Market Players

Today I am going to talk about market players and customers. I will try to bundle together the total customer requirements – there are probably about seven or eight – which I believe you need to sort out if you want to succeed. I will then dwell a little bit on what we think is our winning value proposition towards our customers; I will give you a couple of examples and I will dig a little bit into the competition, as you just heard from Mikael, and how we are going forward.

Offshore companies

In the first slide you can see that there are two elements that are important; the shipyards and the ship owners. We need to be very humble when it comes both to shipyards and the owners; to be a good salesman here is really to listen to what the customer is expecting. That is on the new sales; when it comes to the aftermarket it is very much about direct contact with the ship owners. Again, you can see from the structure that there are many players here, and of course the oil companies like Petrobras, or Statoil where we are, we need an understanding of the customer's customers because they are quite hard also on penalties if you do not provide your business.

If you then look into the offshore companies, this is a complex slide but there are a couple of key takeaways. I would say that the top 20 ship owners control 40-50% of the total market within our segment. It is very much about the people-to-people business and how we operate; if you have a good benchmark here then you can also go into other customers. If you take on Edison Chouest, for example, he controls 2% of the market and that reflects here where he has got 250 ships. Equally, the previous ship you saw, he controls 50% of the Island Offshore fleet; so, if you hit these guys, then you are going to do it quite well.

Merchant companies

If you go the merchant side, as Mikael mentioned, a large amount of the business comes from China, Korea and Japan, so then you need to have the interface with the shipyards. What you also heard is that there is a growing population of owners in that area. So there is no doubt that one of the key tasks from our side is to really make sure that we can grow worldwide. So, to have that kind of transfer knowledge is important for the business.

Customer Requirements

What are the key drivers from a customer? I think that what you will have picked up from the videos earlier today is that it has to be matched to the missions. One of the elements is technical performance; you will never, ever sell products with low quality. That is why Rolls-Royce can be in this business; because we have the brand, but we need to stand up to that performance. The other one is that there is a through-life, so this vessel operates easily after 25 years; that is why we really need to take care, because the vessels are operating worldwide.

The second one is you need to have value for money, and then you are talking about the capex; the investment of the ship needs to make sense. You will never ever get more than a small premium for the capex, but then it comes back to operational expenditure; how you can make a good sustainable product, how the solutions are good, and also how you can maintain. When we talk about long term service agreements into the aircrafts, this is more when the ship comes into the docking and then you plan for maintenance. The squad of our people needs to be available; I can guarantee you, if you are operating in Brazil, you do not take the ship back to Norway. Then you need to have service centres where the business happens. You saw on one of the maps that Mikael presented that where you start to do deep-sea drilling, that is where we need to be.

The other one is the installation availability, and it is the quality side; so when we talk about taking out costs, we also need to make sure that what products we deliver are top notch, just referring to the day rates for this business. And, again, if anything fails, there is one expectation and that is you really need to step up and make the ship operate within the next days and hours. So, for instance, if you are based in Brazil you probably know about local contact and these issues, then you probably need to have spare parts inside a country, just because of the custom issues.

The other element is the system side; seamless interfaces and functional integrity. As you have heard earlier, it is about efficiency and value for money. I think that these are the common requirements from a customer perspective.

Value Proposition

I will now talk about our winning customer value proposition. As I said earlier, I believe there are not one or two elements; I believe there are seven elements here. One of the reasons I believe that you cannot only succeed on one or two elements is down to creating high barriers to entry.

If I start with domain knowledge; this is about understanding our customer demands, but also their customer again. Here is a statement from one of the key people at Farstad Shipping, one of the top ship owners here in Norway. He says, 'UT 731 CD has proven to be very efficient in daily operations, reducing fuel

consumption and cutting harmful emissions.’ These are the statements that we like to see, because that has something to do with customer satisfaction.

As you have heard, we have been working on LNG and pure gas, you have seen that pictures of a big ferry, 1,500 passengers, this was the statement from the CEO of Fjord Line, ‘With the number of LNG-fuelled ferries operating in Norway and the years of experience, the Rolls-Royce Solution was low risk.’ Why? Because you need you have experience to do pure gas engines and to have access to fuel distribution here is also important. This vessel is now operating between Norway and Denmark.

When we talk about product quality and reliability, this is probably a massive achievement. Far Seeker is an anchor handler: ‘Far Seeker: five years of operation with only nine hours off hire.’ We can then go back and say we are going to support your business. So, out five years, only one day for nine hours it has been out of operation.

System integration; 40 years with UT design. This is the intimacy with the customer and that is what we are very focused into. When it comes to responsive global aftersales support, we have more than 1,000 well-trained service engineers in 54 service centres in 32 countries; also taking into account that the opportunity with the cooperation with Power Systems – they have service centres around the world – gives us a very nice opportunity for better responsiveness. Later today you will see the simulation centre here, and what kind of facilities there are. You could imagine doing training in a harsh environment. It is much safer to do it here, compared to on a real vessel.

Last Monday I went to Fosnavåg. That is a small place outside Ålesund[?]. It probably has the highest density of Norwegian billionaires; there are ten ship owners in that area. They opened a hotel, 120 beds, probably no need for more than 30. They opened a concert hall of 500 people; there are only 3,000 living in the city. But on the end of the hotel, they also opened a simulation centre. Then they bring in the squad and crew and train them there, and then they use the hotel, and then they play music in the evening. So training people, training crew, that is about efficiency, and that is a strong value proposition from our side.

In-service upgrades

This is a pure business opportunity from my perspective. I think that when a ship lives 25 to 30 years, you would take the opportunity to do upgrades. When you do upgrades you get fuel efficiency. That will be the advantage for this one.

Two of our latest achievements

The Unified Bridge

The Unified Bridge was award winning just a couple of weeks back. What we have achieved here is to have a complete cockpit, if I can use that word. If you go back five years, it was different components, for each of that. So if you then start to think about big data, how you are operating the vessel, that gives us a very good opportunity for improvements

UT 777

UT 777 is the biggest vessel we are going to do, at least with a contract. We are not 100% sure ourselves what the main purpose of this vessel is, but there are reasons to believe that it will become the most flexible vessel in the world. This vessel should have the capabilities to do construction work at the seabed, and the seabed will become more and more important, because you can operate on the seabed. When you are doing drilling and taking out the oil, then you need to refill the wells. It can probably do something about this as well. So then you have three or four different applications for this vessel that will be very unique.

Offshore market examples

UT design anchor handling vessel

The total value of this ship is circa £77 million. We deliver 42% on OE equipment. Here you can see that the engines are 6% of the total value. Of course, I will come back later to the opportunities for the aftermarket, because that is very important.

Then you have the propulsion equipment. That is 14%. We have a circa 50% market share of the total fleet of anchor handlers when it comes to propulsion equipment. So we deliver not only on our own design, but also for the entire anchor handler fleet. Then when you go to the deck machinery, it is 16% of the value, and here we are close to 75% of the total market. This is about operational efficiency, as Mikael mentioned, because here the ship-owners want to have the best deck machinery in the world. The winch probably has a width of 20 metres, and the height is 6 metres, just to put it into perspective.

On this vessel, we have automation that controls the deck machinery. As you have heard earlier, this is more or less all about making sure that the vessel fleet is operating the deck machinery. Then we are doing high and medium speed and electrical system. I would also like to add that the aftermarket for this business is extremely important. So we give 24/7 technical support. We are close with field service where the customer operates the ship. We have done the availability of the spare parts, and again, that will be an opportunity with the Power Systems to have common spare part locations, repair and overhaul, and upgrades.

Then we are doing monitoring of energy and more and more there will be equipment health monitoring. That will be the next step that we are really going to look into. Of course, the simulation centre is about training. Now we have training centres in Singapore, in Brazil, here, and companies are also starting up in London and Mumbai.

Semi-submersible rig

This is a semi-submersible rig. Why is this interesting for us? Here we are doing the engines, and we are doing the thrusters, and then a little bit of the deck machinery. This is circa 7%, but you have to take into account that the value of this rig is £370 million. The beauty of this application is that if these guys start to drill with this rig – the rule of thumb is it that it takes three to six months – they will be in a dynamic positioning. Then they are using satellites, then they are using the engines, and then the engines run 24/7, to feed the thrusters. So then the aftermarket becomes very important. However, if it takes more than six months, then you start to use anchors. You start to do mooring. So then the anchor-handlers come in, and this is just the business decision from the owner.

Troll A

To give you a feel for the size of these vessels, Troll A is a big platform. I did some Googling yesterday – it is double the height of the Eiffel Tower in Paris. So that is what we are talking about when we start to move these things. Here you can see ten vessels just operating this platform. We had Far Seeker delivered in 2008 or 2009, where we made a world record for how much you can pull. The record is 425 tonnes. The capacity of a winch is 600, but you then use 175 just to balance the boat. Here we have, I think, six anchor handlers and four PSVs. So that is the scope of the game for this matter.

Deep water mooring

The deep water mooring started back in 1978, down to 200 metres. You saw the map where you look into where the new oil fields are; now we have capabilities down to 3,000 metres. We have the equipment to do all these kinds of oil exploration, as to future oil fields and sources.

Mooring of an FPSO

To put it into another perspective, this is a picture of Rio, and I have used the example of a Floating Production Storage and Offloading (FPSO). As you can see, at the top here is the FPSO, and this is Rio. You can see the wires go out to here. That is the task you have to do. So when we talk about, 'Will there be space for the top-end of the market?' Definitely. We will do anchor handlers at this size. We are also going to use all this competence, and you will probably hear some from Sauli, on how we can become leaner, less expensive in design, so that we can push back in more competitive areas – in particular when we go to China, we need to stand up and take that competition. We are going to do that by innovation and lean production

Merchant market examples*1,500 passenger / 600 car LNG-powered ferry*

I am going to show you an example of pure gas. Why do we spend a lot of time on pure gas? Because it is a matter of time before the customer says, 'We are going to use gas.' You will see later, when Sauli gives his presentation, the cost of fuel. So this is about the economy, but the environmental impact of ECCA[?] will grow.

On oil and gas, we are comfortable on the tier three requirements, the International Maritime Organisation's requirements. That was expected to happen in 2016. It was postponed to 2021. Why? Because our competitors, I would assume, do not want to see that part yet, but we are future-proof when it comes to new technology.

On the big ferry, for 1,500 passengers and 600 cars, we provide engines and the tanks and the system, and that has to work. We have had that ship in operation for more than a year, and that works successfully. It is on a daily route back and forth. This vessel is circa £80 million, and we have a value of 20%. Of course, that IPR connected to the tanks and to the gas systems is one of our advantages.

I would like to reflect a little bit on what we have in L'Orange because the fuel flexibility will be very important. Gas has one limitation today, and that is distribution of gas. When we start to get more distribution of gas, this is definitely something we strongly believe in, and we want to be prepared for that matter.

You heard also that with the new engine, you can use the same engine for gas or diesel or dual fuel, if dual fuel comes later. I think that is a good example of when you think about the customer demand, and what it is possible to do with technology.

Naval market examples*Frigate*

I think there are a couple of key elements that are different on the naval side compared to the commercial side. On the naval side we are strong, because we know the key customers, we know their programs, and we are working very closely with our customers.

On this frigate, the value is circa £300 million, and we deliver circa 10% of the total package: handling systems, definitely important on a naval vessel I would assume, power electrics, and on the engine side. I think that on the Naval side, the M to U match is very good, because we need high density engines for speed.

Then, again, propulsion equipment. The key difference between the commercial equipment and naval equipment is that they need to do more tests, but it is very much the same components. The service market, again, is of course very important for this matter.

Competition

To win this race, you really need to be humble, to really listen to what the customers require. You need to work closely. This ship I showed you, the UT 777, we are going to spend 105,000 engineering hours on it. If you think about the strategic diagram that Mikael presented earlier, I would say that there are definitely players coming up. So far, I have seen Wärtsilä, and [inaudible]. MIN probably has an ambition to come, but I think there is probably a way to go, because MIN, if you take ABB, if you take GE, if you take Siemens, they are strong on one axis on the components side.

If you then think about what happens in the regions, I would say look at Brazil. They have introduced local content, they are going to protect, they are going to do what it takes to make sure that internal things happen in Brazil. That will happen, either by law or by trading principles. If you want to run a business in China, you need to have access to route to market, and then you need to be close with the yachts[?], as an example. One day you are a competitor, the next day you are a customer or a supplier, so you need to balance this in a nice way.

If Rolls-Royce want to compete strongly in the forest, we need to do business locally, and there I think we really have a good opportunity, because the brand Rolls-Royce is very strong, particularly in that area. What I am trying to articulate and explain is that within this area, I really support what you heard from Mikael, that the winner is the one that is able to bundle together the complete system in an intelligent way. When you follow the application areas you want to be in, if you have done that missing a couple of items, you either go for development on engineering, or small acquisition could also be a feasible approach.

Going forward

Going forward, we definitely have the ambition to raise the quantity of the business, and then grow sheer in the addressable market. That means that we need to have happy customers that prefer us compared to others. Responsiveness becomes important. It has to be based on follow-the-money. There are some areas in the marine industry you do not want to be in. Safety is one element. If you think about how much of the investments we have been doing have been linked to safety, that is also something we need to take care of.

Coming to raising the quality of the business, I believe that there are two dimensions. One is to be cost competitive and operationally efficient. The other one is then to really improve our strong value proposition to our customers. If you remember the first one I showed you, with seven/eight circles, the best ones, I believe, would be the ones that succeeded, combined with the right cost structure. My view is, of course, we will be the best. Thank you very much.

Innovation

Sauli Eloranta,

EVP - Marine Engineering and Technology

Introduction

Good morning everybody here in the room and also on the webcast. Welcome to the Innovation presentation. A few words about myself: 25 years in the marine business, I am a Naval architect, and I have been working mainly in the ship building and ship equipment industry in Finland, France, the US, and Norway. I have spent most of my career working for Norwegian companies, actually, as they own quite a lot of shipyards in Europe, and working for companies like Wärtsilä, Kværner, Aker, and STX. I have been in Rolls-Royce for five years now. I wanted to join Rolls-Royce mainly because of the brand, because I wanted to make sure that we could leverage the same type of brand identity as we had in Aerospace to Marine, which I thought at that time was less known for the actual brand.

Marine trends

Legislation

Several people have heard me talk about marine trends. I will try to make this meaningful. I will go through this picture in detail, and then interpret to you how we see which trends are having what type of impact on technology development and product development.

The first thing that has been mentioned today is the development of legislation, primarily rules and regulations related to environmental considerations, emissions and so on. There are a lot of rules developments going on at the moment. It is meaningful to know that this is the first time that the entire shipping industry has seen a major change in the emissions levels – about a 90% cut in emissions in about 15 years' time. Before this, the marine business was able to pretty much use whatever fuel it wanted. Very high sulphur content, heavy fuel oil, the least distilled fuels that you could come up with. What this means is that now, in the next ten years or so, there will be some rules that have a direct impact on new builds, which means that they can stimulate new building contracting and that new builds will be required to comply with these rules. It makes companies that are investing in high tech like ours more competitive in that race, because it is no longer just a commodity approach in the power and propulsion systems going forward.

There are also some rules, like the sulphur emissions, that are related to all existing vessels – all the vessels that are used in world shipping need to comply with the sulphur regulations later on, in 2020. That means that they have to be equipped with abatement systems, so they have to change fuel or they have to be modernised to manage different types of fuel. This will boost the attractiveness of new builds, and it will also make an attractive new market for modernisations for a services business.

These tanks are communicating bunker fuel selection for new builds. The one on the left, on 2014, is showing that today about 90% of the world vessel new buildings are constructed so they use heavy fuel oil as a main fuel source. About 10% is marine gas oil or diesel oil as we know it. This is the situation today.

The tank on the right is saying that in 2025, we anticipate the HFO still being around. Heavy fuel oil will not vanish, even in 2025, but the vessels using that fuel need to be equipped with equipment to clean off the exhaust gasses, to comply with the new rules. What is important on the right hand picture is that the LNG fuel share will be up to 30% in the new builds. That is something where we see a lot of opportunity. It is a clean fuel, as we have heard today, and it will provide an opportunity for ship equipment, supplier shipyards, but also ship owners, because this is an inexpensive fuel, so there will be different drivers for this. It is both clean and inexpensive, so it makes sense then to consider transforming your fleet into working with a different fuel.

Then there is a small biofuel canister on the top, in 2025. In the marine bunker fuel forecast, we do not see a lot of biofuels being a dominant source, even though we understand that there are some ship-owners opting for it, and developing that technology. These percentages are based on studies by companies like Det Norske Veritas.

Ship building trends

The vessels will be built mainly in China, even in 2025. There is a red flag indicating a Chinese ship owner, let us say Far Eastern ship owner. You saw earlier from presentations that today that a lot of ship owners are still based in Europe and the US – let us say in the developed world. More and more ship owners will be based in the Far East going forward.

These types of vessels have quite simple machinery. They are primarily paid for their journey. They get their income and revenue from making a journey from point A to point B. They typically carry cargo on the way, but this is an important distinction to these things. It is a very cost intensive, cost focused business, so you either want to go larger in ship size to get economy of scale to take the freight weight down, or you

reduce the fuel bill by making more efficient engine systems. That is something that we see opportunities in, for example in the life cycle revenue. You can refit existing fleet to be more fuel efficient, with products like Promas, for example. That would be the generic trend in the marine business: that fuel efficiency is important for these vessels in the market.

Offshore vessels

Then an entirely different segment, the special vessel segment, or what we call here 'offshore vessels' typically, are in this segment. You can see a deep water harsh environment rig there in the centre. You can see a well construction vessel assisting those rigs, which would be more common in the future because, like we heard earlier today, the offshore oil and gas exploration goes further away from the coast. You need larger offshore support vessels than today, with more bollard pull, with more functionality, with more flexibility, and you are benefiting from new designs because the existing vessels are not always matching those new requirements because it is, let us say, high wave conditions, it is long journeys to the area where you do, it impacts the vessel spec. So therefore this is also stimulating the demand for new technical solutions for these vessels. So not only for new tonnage but, let us say, the vessel specification needs to be adjusted to the new requirements.

Arctic vessels

Then on the lower hand left you see an Arctic vessel, which is a special vessel as well, and I would still say that we have a good opportunity in the Arctic vessel design and machinery. They are typically complex machineries, hybrid propulsion or full electric propulsion, and that is typically driving into specialised ship designs. As you know, ship design is one of the works we do in here, and we can deliver the whole, let us say, mechanical electrical package together with the ship design, also for Arctic vessels.

These vessels, in the picture, do not get paid normally for the journey, ice-breakers might be in some sense, but they are normally paid for their mission, and that is important. So the business in offshore is the journey is something you have to do, you have to steam to bunker your vessel or get new materials on board and so on, but where the vessel gets its income is the work; what it does, let us say, close to the oil rigs or whatever it is assisting to do. That is an important distinction from the merchant vessels that are going from A to B.

So instead of fuel efficiency for the transit, it is then fuel efficiency and comfort for the mission. That means that the vessel has to be in dynamic positioning pretty much 24 hours a day. The whole propulsion system needs to work all the time, whereas in a merchant vessel the bow thrusters, for example, are run, let us say, ten minutes in every two days or a week. These vessels have their bow thrusters working 24 hours a day, seven days a week, so that sets a lot of new requirements.

Bridge design

What you will see more today, also in here, is a whole area of ship user interface; the bridge design, the operating of a vessel, where we are now increasing our efforts in here. Now the vessels are more complex, the crew has more challenges today, and we also brought up, in the discussion, the availability of competent crew. If you have, let us say, a bridge design and you have a hybrid vessel with a lot of mechanical components, electrical components, you could even have batteries in there in the future, and you adjust how you operate that vessel, then what needs to happen in the bridge is more or less what iPads have been doing for the use of computers for all of us. It is turning this complexity into simplicity. So all these bridge designs, like the unified bridge, it is now looking simple but actually it does integrate all the information there is on board and providing the relevant information to the seafarers. That is something that is a challenge in the business, how to make that interface towards the ship's systems from the crew so that you do not need 30 years' experience to run a vessel, because you no longer have that luxury in the marine business.

Satellite communication

Lastly there is also this satellite up in the sky, which is communicating that in the future we will see more need for data transfer and communication between the vessel and the onshore organisation. Today it is quite a tiny pipeline in there, it can be 1 megabyte or so, but if you are running a cruise ship with 1 megabyte total and you have 10,000 people on board, you do not have a lot of bandwidth for each of the persons to browse the internet. In the professional fleet, it is more about the onshore crew being able to assist you when you do your mission; understanding the equipment health monitoring, things like that. It is providing support to the vessel.

Well positioned to meet these challenges

What we feel, and I feel strongly, is that we are well positioned to meet these challenges. So all the trends I showed you in the previous page that we have a relevant portfolio to meet those things. This portfolio is not a commodity portfolio per se, this portfolio is developed normally for quite high-end applications, so with safety, quality, reliability being quite essential drivers in the product development. Very few of these components or products have been developed with just cost leadership in mind; normally it has been something that we are engaging actively with the ship owners to understand 'What are the exact specifications they need to get from these products?' Then we are doing those things. These are all mission-critical products. We are not in some interior furnishing business or something which is not mission-critical; if any of this equipment fails, the vessel cannot continue its mission. So therefore it is mission-critical, as the term says. All of these are.

Industry leading solutions

We have been many times the first in the world with many of these things; for example, the largest controllable pitch propeller ever, largest CP piece in the Arctic conditions, largest water jets in the world, most efficient engine – as we have at the moment – most power dense engines as we have in MTU, most powerful gas turbines in marine business with the MT30, propulsion equipment to the world's largest or most iconic vessels like Queen Mary 2 or now HMS Queen Elizabeth. That has been the driving force, and also that means that we, as an engineering population in the company, also have this huge accumulative experience of working closely with customers, tapping into corporate technology capabilities, collaborating across the sites and borders, and making these things into, always, industrial leading solutions.

The customers in this sense are typically ship owners rather than shipyards in many of these issues. A ship owner is seeing the value of not being in the commodity business. A shipyard might want us to develop the world's cheapest solutions for some of the issues because it is more cost and competition, whereas the ship owners want us to provide most value. Therefore I would say that the portfolio, what you can see in there, is a kind of a value-adding portfolio.

The size of the portfolio is wide at the moment, but I would stress that it is wide and it needs to be relevant. We still have some individual products in our portfolio that are not mission-critical per se, but they are quite few, so we have exited most of those. I think that, going forward, this 'concentration' out of the four Cs means that we are sticking to this mission-critical equipment which are important for the system integration point of view. We just want do stuff that is hard; we do not want to do the easy work. If it is hard that means if we have any problems with our delivery, then the vessel has a problem then we get paid for that certainty and reliability of the delivery. That is where we want to play.

Thrusters

There is this new B33:45 engine as you see, there are complex hybrid vessels you can see also in the upper row, thrusters. If I just take an example of the thrusters. It all started, I think, even before 1937 when Kamewa introduced the first controllable pitch propeller for the marine market with hydraulic drive. The whole thruster ecosystem is extremely wide at the moment, so it has evolved into us being the market

leader in large offshore thrusters at the moment, but it also means different types of thrusters for different applications; we have Azipulls, we have UUC thrusters, and now you can see also on the right the latest technology introduction is for permanent magnet thrusters. We have acquired a company in Trondheim called SmartMotor. The whole organisation is developing permanent magnet technology and we have acquired it for technology acquisition point of view, not for route to market per se, and we are developing a whole range of products with that technology.

So that is something we believe in at the moment. The first products are already launched, like the permanent magnet tunnel thruster, which is super-silent and matched with the offshore requirement where you need to run the thruster 24 hours a day. You do not want to be there with a normal thruster, which is creating a lot of vibrations, if you have experienced on board a ferry or cruise ship, I am sure you have.

A lot of prizewinning ship designs, as you can see, also in there, so that has been successful; 800 UT designs like we discussed. A lot of deck equipment systems, also mission-critical, in there, so those are mission-critical not from the transit point of view but from the value-generating point of view. So if you have any problems with your anchor-handling winch, your mission is in there[?], and then you start to pay, whatever, £50,000 per day or so. So that is extremely mission-critical as well because that is where the offshore vessel gets paid for. You also see this unified bridge, what is in there, so that is important.

Future innovations

So we can see that with this portfolio, relevant portfolio, we can meet those market requirements and market trends that I showed in my previous slide with the fuel flexibility of the engine answering the fuel diversity problem going forward; we are not sure what fuel is winning, but the engine can run with both diesel fuel and gas fuel. The entire portfolio is relevant, and it is going to be more electrical going forward as we see the trends in there. We are well geared to provide complex machineries for special vessels.

Efficiency leader

Again, if I just crystallise what we believe that the future innovation should be concentrating on – and it is two areas in there – which is being the efficiency leader in what we do. It is not just fuel efficiency or the main engine, but this is a system efficiency, vessel efficiency, the whole operational efficiency of a vessel built for a certain thing, and ship intelligence is something I will tell you a bit more soon. So efficiency is something that we lean onto our relevant portfolio because the portfolio, like I said, is not a commodity portfolio, but it is more like a high end, high technical content, high efficiency, high reliability portfolio, so therefore it is a great, again, building block towards being the efficiency leader going forward. We are leading in hydrodynamic capability in Rolls-Royce Marine, so we have our own labs and we have lot of computational capability in the company. That is also contributing, being able to make a lot of high end, hydrodynamic research into making those systems easy.

I have to highlight, this is slightly different from, maybe, gas turbine design, so we cannot just limit our hydrodynamic competence into the actual propulsor, but to always talk about the ‘hull,’ the vessel-level hydrodynamics. That is complicated because you have a free surface and you have all the interactions with all the components in the propulsion system, but we can do it.

Efficiency means also large opportunities in the aftermarket, so we have one product, for example, Promas that is gaining let us say 5-8%, depends on the application; it is gaining a lot of the losses that you have a normal propeller with a swirl in there, so it is regaining the swirl energy. With that 5-7%, 5-8% it means that if you take a large ship owner in the shipping business, 5% efficiency increase is worth £100 million a year in money, so in the bottom line. That is not trivial. Now the thing is that in Aerospace, like we heard, John Rishton was happy to get 1%. Now 5% we can get with one gimmick only, and there are many areas where we can play this environmental thing; we can switch over to LNG, we can repower vessels, we can get down to 20-23% lower CO2 just because of a change of fuel, we can change some of the hull forms, we

can change some of these energy-gaining devices. It is a big saving you can get, so 5% is something you can get in many applications.

Ship intelligence

Moving over to ship intelligence, this is a kind of disruptive opportunity at the moment. What we think is that ship intelligence is similar to system integration, but it is a kind of higher level of intellectuality embedded in the systems. We have our portfolio which is made of products that can be knitted together to form an integrated system where we have been strong. We have also been able to have ship design so far knit those integrated systems into a seamless entity called ship design.

Now, with the ship intelligence, it is something that we want to make sure that our product delivery, our system delivery, is relevant, so that the intelligence is something like big data or software built on top of the actual hardware delivery. We believe that if we stick only to hardware deliveries, we would then transfer ourselves into being, again, a commodity provider gradually if we are not able to do it. This is also to do with value, this is helping the customer; this is supporting the customer during the life cycle of the product, and again I would say, personally, that I think this should be turning complexity into simplicity. Ship intelligence is not making things more complex, it is actually taking all the complex things you have on board – there is a lot of data on board – but providing, let us say, intelligence and relevant information to the crew and to the maintenance of the vessel.

The picture on the right is also showing the unmanned vessel. I would highlight this thing of drone vessels, unmanned vessels; so remotely controlled vessels where we have had a lot of publicity. It is a technology platform, so it is important for us to know where we are heading to, and we see that all signs are referring to the same trend that there will be less crew on board. Also, in the offshore vessels we have safer deck operations, we want to mechanise the thing. We want to limit the exposure of the crew in harsh conditions; take crew first from the deck inside the vessel, then from inside the vessel onshore and help that trend. So this is more like the endgame or long-term vision, if you may, where we are ending up. But of course we can do pilots with this technology faster.

The best way to predict the future is to create the future

I think this is my last slide. The best way to predict the future is to create the future, so that is what it is. We believe that the ship intelligence is an area where we can complement our current product offering, again, for you to feel comfortable when you do the rounds later today in this building you know what I mean. We have started this journey about creating a future from those products, from systems. If you take this intelligence, we have had product-specific controls, we have had the whole automation control system for the whole vessel which we do the bridge designs and then remote operations that we can take remote access to a vessel from here, and you will see a room where that can be displayed with a lot of displays. So we can replicate a vessels control room dials and so on and we can assist customers.

Trends from products to technology

Finally, what I believe that the three big issues for us are that there is a trend from products to technology; like I said, hardware: if you stick yourself to hardware, that is risky; hardware might not be the selling point in the future. Technology means more about enhancing the hardware with the system offering, it is about the technology which is in the product, but it is also the technology; how you bundle products together. Ultimately, for example, what we call ship intelligence is a technology that is a powerful thing where you need to have your portfolio to build on, but that will be a primary differentiator going forward.

Wide product portfolio and integrated systems

Then also, what are the building blocks or stepping-stones in here? So this product portfolio was our stepping-stone to system integration. How could we have done system integration if we did not have the product portfolio that we had? So that was the key to do that. Now what we say is that once we are big in

system integration, that is a stepping stone to ship intelligence because through system integration we have access to all our systems so we know how each part of a vessel is working, we get the information from there, we get data from there. Ship intelligence is then about making sense of all that data that comes out of the systems, and also about transferring that data further away from the ship and starting that journey that you could have more people on shore than what you have in the vessel at the moment.

Collaboration with leading ship owners

Last but not least, the long tradition, the collaboration with leading ship owners that has been in here for tens of years or closer to 100 years in some parts of the business. That is something that you cannot really copycat easily because it is a relationship that is inbuilt, it is a kind of institutional approach to things. It is not just those individuals that are in the customer front, but it is that institutional built-in capability and built-in relationships to our main customers and stakeholders that we have in this business.

So I think that people might come into our business and they might be competitive, for example, in one product. Therefore I would say that, yes some people say it is a low barrier to entry, I think maybe in some product areas it is a low barrier to entry, somebody could make a strategic investment in one of our products and want to come in there. But it is entirely different from that player than, say, that they would be as competitive in system integration because they would only have that one product. Then if you are not in system integration they would also have a very high barrier to entry going into this intelligence, getting all the information from everything. So we are well placed in there because we have a lot of kits; 25,000 vessels with our kits, that is immense, so nobody can really pick it up and just come tomorrow saying 'Well, we beat you.' I do not personally think that.

Summary

So as a summary for all of this, I am convinced we are well placed to meet the future market trends. Also, we have already purse and technology that can conquer that, and we are continuously developing that also going forward. Thank you.

Profitable Growth

Mark Alflatt

Finance Director, Rolls-Royce Marine

Introduction

Thank you, Sauli. Good morning everybody. I will add my thanks to all of you, first of all, for making the trip to come and see us over the last couple of days. I hope this morning started to shine a light on our business.

Quite a few familiar faces in the audience who I know from previous roles in the company, but for those of you who do not know me, I am Mark Alflatt, I am the Finance Director for the Marine business. I have been in the business about 20 years this year, in Rolls-Royce. I have done a number of roles around the group; finance, commercial, my most recent role before this, I spent seven years running the investor relations team so I know many of you from some of those engagements, and I have been in this role as the FD for the last two and half years, so I do not have a deep marine industry knowledge compared to some of my colleagues you have already heard from this morning.

That has given me, I think, an opportunity to ask some of the basic questions: 'Why do we do that?', 'Why are we doing it there?', 'Why is that important?' That has been, I think, quite a useful backdrop to bring to the business and for me to challenge the business, but the business to challenge me back over the last couple of years, and that has been, I think, hopefully valuable to the team, it has been really valuable to me,

and I think it is informing the way we are thinking about some of things Sauli talked about in terms of innovation going forward.

Because of my previous role, I thought I had a pretty good view about what we do in this business, what products we make, how that fits together, what is important. But what I actually found when I got in and really got deeply into the business, and again, some of the information you have seen from Sauli and the rest of the team this morning, this really is a fantastic technology business. It is easy, and I am sure for many of you who are not quite as familiar with the Marine sector, to sit and look at the kind of products we make and think this does not feel like a Rolls-Royce product, it does not look like a high barrier to entry. Hopefully some of the insight from the team this morning starts to glue some of that together, and that is absolutely what I have seen over the last two and a half years. This is genuinely a high-technology business. The kind of challenges the guys have talked about, some of the things I am going to touch on as we go through, this is really, really, complicated stuff and absolutely fits within how Rolls-Royce works together. So that has been a really enlightening process for someone who actually thought they knew this business reasonably well moving into the role.

Summary

So I am going to pull together the third strand of the strategic framework, profitable growth, and I really want to focus my comments this morning in three key areas. I am going to start in a few minutes and just contrast and compare the business model. I think, knowing many of you in this room, you are very familiar with the Aerospace sector, you are very familiar with that business model, and you may look at our business in marine and think 'Well, that does not really look like a Rolls-Royce business.' I am going to try and step you through a few characteristics to try and pull out where we are very similar and actually where there are differences, and important differences.

I am going to spend a few minutes and just reflect on historical performance. This business has been transformed in a decade in terms of its scale, in terms of its importance to the group, and certainly in terms of the growth opportunities we have ahead of us. Potentially a strange thing to say, given that all the challenges we talked about in the last day around the sector, the industry, overcapacity, waning oil prices, but there is no doubt there are big opportunities ahead of us. But it is worth just spending two minutes and looking back because this business has grown significantly and become a very important part of the group.

Thirdly, and I guess probably the nitty-gritty of the session and really where you want to spend most of your time, and we are going to spend a little bit of time talking about cost and competitiveness. What are we doing today? What have been doing over the last couple of years and what is ahead of us? Because there is, again, I think, a lot of opportunity in this business as we go forward.

Growth and capital allocation

Building on our strengths

So before we get into that, just a couple of quick slides I think to keep in context before we really dive into the cost piece, how this all moulds together. Now you have seen this slide before I think; John Rishton will have talked to you about this framework, in terms of the key elements of profitable growth, back in June when we did the Capital Markets Day then. I think, linking this to the conversations we have already had this morning, Mikael first, then John talked a lot about the market, the customer, so I do not think I really need to dig any further there. You have just heard from Sauli and seen a lot of very, very impressive capability that we have, where the market is moving to, what we can already bring to that, and where we are going to be focusing our attention going forward.

I think it is important to keep in mind that not just the group, but Marine, has had innovation at its heart all the way through its decades of existence, whether it has been owned by Rolls-Royce or predecessor owners. This business, I think, absolutely has adapted quickly to the demands of the industry, it has

listened to and adapted to its customers, and the innovation process is absolutely an intimate relationship between the customer, the operator, ourselves, our suppliers. That has really been the heart of what has driven the business over the last few years. Finally, the cost and cash element; we will definitely get to that before I finish.

Now, one disadvantage of being the Finance Director is I do not get to use as many pictures as Sauli, in fact I do not have many pictures at all. So, I am afraid you will have to labour through this. We will dig into a little bit more information and data. I do not have anything quite as glamorous as Sauli to show you, but hopefully overall it will be fine.

Delivering growth and value creation

Again, just looking at the key elements of growth, because it is not just about cost cutting, it is not just about driving our cost base, our supply chain. We spent a lot of time this morning on the left hand side of this chart, and I hope it is pretty clear from the conversations from John, Mikael, where we are, the capability we have, the sectors that we can address, and as we move through that, the key technologies that Sauli's talked about; ship intelligence, LNG, systems integration, the services model. Starting to pull through some of those capabilities we have in Nuclear and Aerospace to help give us more remote monitoring and information from the vessel, and not just for service engineers we have on board. So I think the team have spent quite a bit of time on that.

Grow services

The bottom bubble here around grow services, I think that is clearly a key part of this sector, just as it is for the rest of the group. A product in service for a very long period of time, you have seen from some of the videos we have shown you in the last day or so these things are operating in very difficult conditions. I think John talked about a PSV charter rate at \$50,000 a day, a drill ship at \$700,000 a day, plus availability and reliability is absolutely crucial. These things are operating well away from their domestic base, so having the capability, having the support network to maintain those vessels in service is really crucial. One of John's slides really struck me actually, sitting in this morning watching it, and I had seen the slide before, but actually just looking at the chart where he said the vessel had been off hire for nine hours in just five years. That really informs what this business and what this industry is all about. Creating capable product that can operate in the toughest of conditions day in, day out and earn revenue for our customers.

Clearly grow services is a key part of our strategy, it is a key part of the model in our business. As you will see, it is less significant today than it is elsewhere in the group. It is just over a third of our revenues, and I will talk to you as we go through a comparison with that model.

Rationalise product portfolio

Then, I guess, we are starting to get into the areas I am going to focus on around rationalising our portfolio. Sauli mentioned just at the end of his session we have a very wide range of products and variants that fit on a range of different vessels that have grown up over a long period of time. I think, as we go forward, we are starting to focus more on what are those key products we should do ourselves? What do we not need to do for the customer? What can go into the supply chain? What are those smaller segments and smaller businesses where they are not going to add significant value going forward? We have started to close down some of those businesses, exit, and sell some of those businesses. Typically relatively small, I would say, in the last couple of years, and I think that is probably right. There are big pieces of the portfolio that we should rationalise in that respect, but there definitely is a focusing in on what is the capability we want? What are the things we want to invest in going forward? Who are the better owners for some of those smaller businesses?

Improving competitive positioning

Improving the competitive position, I think, then wraps up almost everything to do with cost, and as we go through here I am going to try and break open for you the cost base we see today, what the key elements are, what we control, what the supply controls, and what we are doing on each of those elements to drive that competitive positioning.

Building on opportunities with Land and Sea

Just finally, just to wrap up this chart. Lawrie touched on it right at that start. We are just in the early stages, I think, of looking at the opportunities, both top line supply chain cost as we integrate the Power Systems business into the Land and Sea, and there is definitely opportunities there. Again, a couple of examples that came through, I think, in Lawrie's presentation on type 26, there are going to be lots of opportunities, I think, as we pull these portfolios together.

Just the final one before we move off I guess to cost piece. It is not just product, it is not just supply chain, but it is overheads. We have looked at and continue to look at many areas of the business as we consolidated sites and businesses. We are looking at our back office functions and we have made quite significant steps around the cost base there, taking out, I think Lawrie probably said, around 20% of our support activity, more than 500 people over the last couple of years. I think as we go forward there will definitely be further opportunities to do more of that.

Balanced business model

The first of my three key items, I just want to spend a little bit of time and step you through this. I hope it is clear from, again, the previous sessions what you have seen over the last day or so. The fundamental drivers in this business are absolutely the same as they are elsewhere in the group – population growth, demand for energy, transportation, increasing regulatory challenges that Sauli talked about in quite some detail, are all absolutely relevant to what is going to drive this business over time. I think the fundamentals absolutely mirror many of the things you understand about the group when you look at the gas turbine and Aerospace businesses.

Barriers to entry – innovation, systems, long service lives

The other area I would pull out is, whilst the product cycles are shorter, this is again driven very much by things you will be familiar with for the group. We spent a considerable amount of time and money and IP creating new capability. We put product into market that operates for very long periods of time; 25, 30 years Sauli talked about; I think John mentioned 40 years of designing the UT vessels, many of which the first ones 40 years old, is still in service. Then the points I have just made about the aftermarket model, these things require significant support.

I think when you look at the nature of the model and you look at the capabilities that we have in the barriers to entry, what that creates is no doubt, that fits very well with what you know about the group and I hope none of that is a significant surprise.

Fragmented industry – suppliers, customers, regulators

However, the industry's structure is very different; the supply chain is very different. Mikael talked about it, I think John talked about it. It is very, very fragmented in the way that shipyards engage with the supply chain, that we engage with like ourselves, in the way that we engage with owners and operators, regulators. The framework is different in different parts of the world.

That creates a lot of fragmentation. That indeed informs the way we organise today, which I will show you as we go through. I think that is quite different in terms of industry structure compared to what you see in Aerospace and indeed what you will see in our own Aerospace business.

Modest investment and short time-to-market

John Knudsen I think gave you a good example last night of the scale of investments we are making in this business. He talked about the new engine that we just brought to market in the last month, three years to come to market, £25 million. I think a couple of the guys talked about it earlier on. These are not big bats. There are a number of areas we are investing in. The level of intensity of our R&D investment has typically been relatively modest in this business and it is much quicker. It comes to market much more quickly, so two to three years is not uncommon compared to multi years, if not more than a decade of the kind of product cycle, again, you are used to in the Aerospace sector.

That is quite an important contrast. I think if I pull that together in R&D terms, that Sauli showed you quite a lot of opportunity I think and talked more about, we need to spend more on innovation, more on R&D. I think we will. We definitely will.

Historically, we have probably spent 2% to 3% of our revenues on R&D in this business. In truth, that is probably a little bit low. We have probably underinvested in this business over the last 10 to 15 years, whether it is technology and probably in our footprint, which I will talk more about.

I think that will go up. I do not think it needs to go up a lot and as you have seen from the skeleton of the numbers. In the context of the group, these are relatively small amounts of investment to access some quite big opportunities. That is an area where I would say the drivers are important but it does not necessarily fit the model that you guys understand well today from Aerospace.

Short cycle for new OE, aftermarket primarily Time and Materials

I think the other element, and we talked about it a little bit last night in terms of the level of visibility in the business and the level of the ordering patterns, is the lead times in our business are relatively short. On the OE side, if you are providing equipment and products to a vessel type, it can be a matter of months: four, five months for some of the smaller products. In the merchant sector, especially from going through the tender process with a shipyard, ordering the equipment to actually delivering, relatively short. In the offshore sector, some of the more complex vessels that John showed you, at a maximum, it can be 12 to 18 months.

This is not a business where we have multiple years of visibility of individual contracts. To give you a sense of scale, at the peak of the up cycle in the middle of last decades, the industry had three plus years of order book and we had something similar in our business. That is unprecedented, I would say.

We are typically operating on anything between nine and 18 months visibility around new equipment. Much shorter than you are used to in the Aerospace sector where customers order significant amounts of aircrafts and engines which spread out over a number of years. That is not how this industry and this business works.

In the aftermarket piece, again, it is much shorter cycle. Spare parts roughly half of our revenue in aftermarket. The ordering cycle there can quite literally be a few days to a few weeks. The turnaround time from an inquiry for a customer for spare parts can be literally two or three days a week, maybe a couple of months at maximum. Where we are doing major upgrades to our services business, you may get a little bit more visibility because it is allied to a dry-docking event. You can see when the customer's scheduling to take the vessel out of the water and do major upgrades.

However, again, nine, 12 months is not unusual. The dynamics in terms of what is in our order book and the level of visibility that gives you is quite different.

Challenges

I think that clearly creates some challenges around how do you think about the business, what are the lead indicators you are looking for. I know from conversations I have had with many of you in the past and indeed in the last 24 hours, those are important hooks you are trying to get and I think we understand that.

I think you have to recognise that is how the industry works. We will give you as much information as we can. However, as you have seen in the last couple of years, two or three years, there is a lot more flexibility in this industry for customers to take their time, delay orders, and reschedule things. It does not necessarily mean the demand has gone away.

The fundamental drivers are absolutely there and all the stuff you have heard this morning should give us all a lot of confidence around that. However, on any given month, quarter, half year, things move around. It is the nature of the industry.

Aftermarket

Just on aftermarket, I think two things to say. Again, the model is much more flexible as I have talked about. Ordering patterns are much shorter. However, also the contracting model is quite different to what you see in Aerospace. You have progressively become much more familiar and aware of the total care of the outsourcing model, long term support powered by the Aero type models.

The Marine industry is moving towards that and we are moving towards it, but it is a relatively small piece of the pie today. Much of what you will see in our business is a Time and Materials ordering pattern. Customers place demands for pricing, they get orders, it gets delivered.

We are about a £750 million revenue services business today. I would say something around about £20 million a year is what you might consider a long term contract. It is relatively small. There are things happening but it is not going to be transformed in a number of years. This is a much more flexible time and materials industry; it is how the customer wants to operate.

Strong return profile

I guess just the final one, there is no doubt, I think in this business, we can generate strong returns. I will show you that in a second. I think the returns we can get in this business, whether it is margins or longer term return on capital employed, are very competitive with what we see in the sector and very competitive with what we see in the group.

As you are thinking about our business – and I could have put another 20 characteristics on there, I am sure you have probably got things you would like me to compare – these are important comparators and differences.

I think the important one is right at the top. Absolutely, the drivers to this business are going to be the same as you see in the group and absolutely the model is very similar.

A decade of growth

I do not want to spend long on here, just moving to my second point, what has actually happened in this business. I have just pulled out revenue, margins, profit and return on capital employed. Two or three comments I think.

I have already touched on this. This business has been transformed over a decade. Late 1999, the group acquired Vickers. We were really a naval business then. We have stepped into the commercial market. We had very significant growth supported by the offshore industry but also, as you can see a little bit on the top left-hand side, significant growth in the services business. Service is about 150% today of what it was at the start of its timeframe.

That growth and increasing capability in the market, more service centres, as I will show you later on in the presentation, and the mix has clearly been very powerful as we have got volume and mix into the picture. Margins have grown strongly, it is fair to say they have softened in the last couple of years for many of the reasons you understand.

Return on capital employed

However, I think we should just stop briefly on the right-hand chart here at the bottom. This is delivering a pretty healthy return on capital employed. This is a relatively capital-light business. We typically, through the cycle, operate on relatively neutral if not negative working capital. The cash profile is more balanced across the business and the industry, so we get pretty reasonable deposits when we take in the equipment order, we get milestones as we go through the build and delivery cycle. Then as I said, the aftermarket is a time and Materials business. We provide the support to the customer, we deliver the spares, and we get paid.

I think the cash profile is much more balanced. It does not mean that there is a relatively modest amount of invested capital in the business. Maybe that capital increases a little bit going forward. We will definitely aspire to spend more on innovation. I will show you later on we are going to spend some more time transforming the footprint. That is going to conceive some capital.

However, I think that is why we need to really drive for operational efficiency elsewhere in order to manage that. There is no doubt we can continue to deliver very strong returns on capital ahead.

Focus on the four C's

Moving on to my third point and what are the elements we are going to focus on to drive growth through this business. John talked a little bit last night about what the group is doing on cost. I think he said, quite fairly, Marine has made a start but there is a long way to go. Absolutely that is true.

We have been quite focussed on this for two or three years now. It was clear that the lead indicators were telling us things were slowing down, excess capacity. It was clear when we looked at our own footprint that we needed to adapt to that. Not just because of the short terms issues, but because of the nature of where the cost base is. Mikael I think contrasted that in his session when he introduced his understanding of the business when he joined from outside.

I think we need to be clear the last two or three years have been tough and we are already well underway with a number of change programmes. I have pulled out I guess the way I have grouped them around the product around business processes and systems and then the footprint and also the source of supply.

Product portfolio

Briefly on product portfolio, I think Lawrie mentioned his, and as I touched on at the start, we have certainly taken out some smaller businesses, some non-core products. We have closed three businesses in the last couple of years and working on the exit of a couple of others. They are not big, as I said earlier, but nonetheless, it does help us focus in on what is going to be important.

Business processes and systems

In terms of business processes and systems, we live on almost 80 different locations today. Just under half of those will be operational sites, so we have got just under 30 operational sites in this business. Across those today, we have 18 different ERP systems, the legacy of historical consolidations in businesses acquisitions where we have not successfully implemented common ERP platforms. That absolutely is a key priority for the business.

It has to be a key tool that we have to deliver better planning tools, better ability to manage load changes across the organisation. It is a key building block for what we do next in terms of optimising back office support and, again, the next slice of overhead.

We are about one year into a full-year implementation programme. We are going to spend about £30 million on that over the timeframe. That really is a key part of the glue that helps us transition not just the business we have today but also the transformation of the footprint going forward.

Footprint and supply chain consolidation

The last two on here, footprint and supply chain consolidation, I am going to spend a little bit more time on just going forward. However, before I do that, just try and pick for you the Marine cost base.

To keep things simple, we were about a £2 billion business last year, slightly more; £230 million or so of EBIT; so £1.8 billion of costs in total. The right-hand chart here shows you the main categories of costs. About half of what we spend is on material, casting, subassemblies, modules, gears, drafts, etc. A lot of that is in the supply chain. Much of what we do in our various facilities is essentially in assembly and test business today.

Indirect spend is a range of other things, whether it is subcontract labour, IT logistics, support for the operational base. Headcount is just what it says it is, 6,500 people spread across our business. I have grouped everything else into other costs, whether it is other overheads, restructuring, R&D is in there, so those are the mix.

Make/Buy similar to Aerospace

First observation I think on the right-hand chart is our 'make/buy' is actually pretty similar to Aerospace. It is about 80% 'buy' today, 20% 'make' and as I will show you, that is quite concentrated around where our facilities are. We need to progressively consolidate and relocate those. Indeed, we are moving on with that.

Key programmes addressing footprint, LCC sourcing

In terms of overheads I talked about earlier and headcount, after two years, we have reduced our headcount where we have consolidated functions. John talked in his session about consolidating his businesses into one and taking a number of heads out. We have done that across the functions and a lot of back office facilities. Again, I think that continues going forward.

Over 90% of our cost/supply chain and headcount in High Cost Countries

On the left-hand chart is a couple of – I think one of the points that Mikael talked about. 90% or so of our cost in our own facilities and our supply chain is in what we might consider high-cost territories. As we look ahead, that clearly presents us significant opportunities.

Dispersed services network

Just a sense of the dispersion of the business, we talked about the industry being very dispersed in ourselves. This is our services network. I think you probably saw some of that on one of the videos earlier on. There is about 60 or so locations on here. They are not all fully functioning service and repair workshops. We have got just under 40 of those. We have got three customer training centres on here, one you are sitting in here in Norway is our biggest one but we have got equivalent centres in Singapore and one we are developing in Brazil.

Then a number of service capabilities and support and a number of our manufacturing plants, so you can see them in the orange and green at the top there, typically grouped around the Nordics. That is around 2,000 people, 1,000 or so service engineers, the guys out on the vessels in the shipyards working with customers.

If I overlay where our operational base is, you can see much of that is grouped around the Nordics, Poland, the UK, the US. I think Mikael mentioned maybe in one of his charts three-quarters of that cost is sitting

around Europe and Northern Europe. As I said, it is characterised by quite a fragmented operational base which we have been seeking to consolidate over the last couple of years, much more to go.

However, I think this is a pretty telling chart in terms of when we think about the cost in our own business, the cost in the supply chain because much of the costs is grouped quite closely around our own facilities.

A significant opportunity

We have made a start on this. Over the last couple of years, we have closed facilities here in Norway, in the UK, we are in the process of restructuring in the US and elsewhere in Europe. This year, we have announced closures of sites in the UK, we are restructuring plants in North America, in Korea and just last week, you will have probably seen an announcement that we are closing a site just further down the coast in Bergen.

This is a significant opportunity. As I said earlier, we got just under 30 operational sites today. I think as I look forward over the next few years that will almost halve. It will not exactly halve, but there is considerable consolidation as we pull these facilities together, narrow the portfolio, things we are working on, seek to move some of that capability into the supply chain.

As I said, about 80% of what we do is 'buy' today. I think it can be a little bit higher but not a lot. This is significant raw material that we are working on to drive the improvement in the business and support future progress of the top line.

Lower cost sourcing and engineering

Just finally, what are we doing on low cost sourcing? As I said, about half of what we spend our money on is material. The left-hand chart tries to break that down, about £900 million or so last year. I have broken that into three categories.

Partners, Naval and Services

The partners and the naval piece, there are elements of our spend base which are not available to be relocated. In the naval industry, no surprise there will be export controls that will prevent us moving some of that. That constrains some of it for some period of time.

We have got a number of partners we are working with, both within the company. An element of our supply chain is gas turbines and outside the company, and again, that is not easily addressable in the short term.

No LCC options today

There are some elements of our spend where simply there is not any low costs capability today. However, there is about £400 million or so of that spend today, 44% where we are focussing on looking for lower costs suppliers. Low cost to us means or the way we have assessed it, any territory where the labour cost is less than half of the labour cost in Finland. Finland is probably our lowest cost high cost country, if that makes sense. That is the benchmark against which we have applied to look at territories.

That is creating opportunities for us in Eastern Europe, Poland, Romania and Bulgaria. We are looking in Europe. It is also creating opportunities in Asia. We have already got some capability today in Vietnam, in China, in Korea but I think we need to take more advantage of those going forward.

Addressable

We started work on this addressable piece. We have actually made pretty good progress in the last couple of years. Today it is around about £120 million of sourcing from those low cost territories, about 30%. I think over the next couple of years that can certainly go to 40% and 50% certainly before the end of the decade.

This is meaningful. Our experience as we have gone through this in the last couple of years is that we are typically seeing cost reduction of about one-third compared to our current established supply chains are. These are important steps. We are absolutely focussed on improving that as we go forward.

Engineering resources

The right-hand side of the chart, engineering; for everything you have heard, whether it is innovation in Sauli's environment, whether it is cost reduction, whether it is sustaining engineering, whether it is working with a customer to develop new product. I think John talked about 105,000 hours of engineering time to work on a highly sophisticated vessel. Engineering is at the heart of the organisation. It really is the spine that binds this organisation together.

Again, as you look at it, the vast majority of it just groups around where our operational locations are today. Good reason for that. You need to be close to the manufacturing location. You need to be close to the customer. You need to understand what is driving the customer in order to make those connections. However, there is no doubt we do see opportunities I think to move some of that more routine engineering activity into lower cost territories.

We have got a little bit of that today in India. We are in the process this year of recruiting another 100 engineers in India. I think that certainly offers us more opportunity and allows us to build on the engineering capability that the group has in India over the next few years.

I think if I look at that picture, the majority of our engineering resource today is closely clustered around Europe, the US, again, those high cost territories. I think over the next few years, four to five years, that could quite easily be 20% to 25% of our population should be in lower cost, whether it is in Poland, Eastern Europe, India and other areas in Asia.

Again, the gearing is pretty meaningful there. Again, our experience in India as an example, the cost of an engineer compared to one of our high cost territories is anything between 20% and 25%. We can do a lot more as we move engineering to some of those lower cost parts of the world.

Summary

I hope you are getting the sense that this is absolutely a core business to Rolls-Royce. I hope you are getting a sense of just the complexity in our products in the way we engage with customers on their vessels and the importance of that complexity and operating capability to our customers.

The challenges of the industry are getting tougher. John shared a couple of good charts showing just how the change in operating depth that some of customers need to operate in. This is a business which has those capabilities. This is a business which clearly demonstrates the strong chart record over the last decade or so.

Top line and returns, there is no doubt, this is a business where we can grow and we are delivering meaningful returns. I think clearly over the decade, this has become a much more meaningful part of the portfolio.

There is no doubt the two or three years just gone and maybe the period forward, life has been pretty tough for the industry and for all of our suppliers in it, and we are no different. We are on that journey I think of adapting our own cost base working with our suppliers, looking at things like engineering, looking at things like our overhead structure. We are making some progress. We have got a lot of opportunity ahead of us. There is no doubt.

I do not think we, for one minute, I think, need to do that just because the environment is tough. We want to do it because we know if we can optimise the cost base, there is a lot more opportunity out there. You guys have shone a light on to some of the market opportunities.

Just wrapping up and I will hand back Mikael. This business has grown dramatically over the last decade. There is no doubt as I look at the opportunities the guys are working on, looking at the opportunity we have around our cost base, with things we can control that we can grow at least as quickly in the next decade as we have in the last. Thank you.

Summary

Mikael Mäkinen

Finance Director, Marine Business

Thank you, Mark. I only have one slide for summing it up. I hope that we have been able to give you a bit better understanding of the marine market as a market and also that even now when doing the Q&A going throughout other questions that you have and of course later if you have more questions about it. I hope that this has given a foundation.

This is a very interesting business. It is a sizable business that I hope that you have understood well during the day. We very well understand that these are short-term headwinds. We are going to take the measures needed for efficiency, cost cutting and so on. But at the same time: good tailwinds in the medium-term. That is why we were talking about innovation. We need to be prepared to be one of the winners in this game. I hope you understood that we have a clear strategy, profitable growth. The market is going from products to systems to solutions to intelligent ships. We have chosen an approach of mission critical systems, integrated systems through life services. That is our choice and I know that is the winning concept.

Some of you have asked about the new investments' capex. Yes, there will be more needed in the future, but on the Rolls-Royce scale, it is still very moderate and it is a short payback time.

I am saying that automation intelligent ships are coming, but also that the business is cyclical. You have to be in a number of ship types to counter the cyclical. We have to be better on the lifetime support because that also counters the cyclical.

The Rolls-Royce Group gives us something. It gives us data analytics, products from Power Systems, service and sales network. That is a very, very good home for a marine business to grow it into real consolidator and winner in this market. The return on capital employed as you saw is fairly good.

To sum it up, if we can take care of the customers, be close to them, we spend enough on innovation, on real innovation and we think about growth as a profitable growth talking about the short-term and the medium-term, then 100% sure that we are the winners. Thank you. Now I think we go over to – is it time that we go over to Q&A.

Q&A

Lawrie Hanes: Firstly, on the panel, we have got the presenters. Also in the room, we have two or three other key executives from the marine business. We have got Don Roussinos on the far side, who is the Head of the Naval Business and Andy Marsh who is Head of the Services Business. We have got the right people to answer your questions. Who would like to start? There is a question there.

Charles: Two questions. One on offshore: As far I can see, it is a 3% long-term growth business. The problem is that if you go back to 2005, it was £0.5 billion. It is £1.2 billion in 2010, 2011. It is now £850 million in OE. If we grow that 3%, would you like us to grow it from £0.5 billion in 2005, £1.5 billion, £1.2 billion in 2010 or from where we are now?

Lawrie Haynes: Okay, thank you. I think I will ask probably Mark and John to come to that.

Mark Alflatt: Okay. Sorry, Charles, do you mind just giving those two data points again you said.

Charles: You have clearly gone through a big cycle: 2005, when we are about £0.5 billion up to I do not know, £1.2 billion in 2010 and it shrunk down again. It is a cyclical business. If you are telling us to grow at 3%, at what point did you like us to start growing it from?

Mark Alflatt: I do not know if I can give you the individual data –

Charles: Alright, where are we on the cycle?

Mark Alflatt: Oh wow. I think what you heard from Mikael and from John in fact, there are a number of different cycles in this sector. Over the last couple of days, we have talked a lot about euro prices collapsing. What John showed you is that we are actually starting to see some anchor handling ordering.

It is actually quite difficult to say, this is where we are in the cycle and it's all going to follow down because different vessel types, different equipment types we have a rather different times in those very cycles. It is just quite different to give you exact data points.

You saw from some of the charts that Mikael obtained and he talked market opportunity over the next decade, we see a core part of the market we are just seeing today growing by 3% or so over the timeframe.

I guess from our perspective running the business, we are here looking at that kind of timeframe, not just year-to-year. I cannot say, well, you should start here and it is going to be 3%, 3%. I do not think you would expect me to do that.

John Knudsen: I think the answer is you can start from today. The rationale for saying that is there are definitely some segments that will go down. If you look into the PSV, we think that that has been an area where there has been a strong growth last year. We have also taken into account that the value of the PSV, compare to an anchor handle or maybe the subsea construction vessels that we really believe that will come now has a bigger volume.

Yes, there are some headwinds coming. We have not seen anything so far that the oil price elements has an impact. We believe that if we have the selected areas where we are going to grow and that is into the subsea and it is into the anchor handlers as examples, we believe that in total value there is growth.

Charles: The second question is 6% to 32% return on capital, as far as I can work out, that means you almost halved your capital employed over that time period. Can that go further? What is the trend on the capital employed side that you can do that now?

Mark Alflatt: I think it is certainly been optimising the working capital, no doubt about it. As I touched on, if you look through the cycle, we have typically operated on relatively mutual if not negative working capital. There is no doubt I think in terms of the market getting tougher, the payment profiles are getting tougher a bit, they are still pretty positive.

I think a big driver in the picture I showed you, Charles, is both volume – we have seen significant growth in the base of the business over that time – and, importantly, services. You have seen services grow significantly. It is about one and a half times today what it was in the start of the timeline. I think that is an important part of that return on capital mix going forward.

Charles: Employed seems to have halved.

Mark Alflatt: It has come down, but again, be careful with the data. Depending on what you are looking at in terms of your own analysis, remember that over time, for example, marine used to include submarines. There have been some changes in some of the segmental base which may or may not be helpful to you.

I think looking forward, as we said, you should expect a little bit more money on innovation and R&D. There is no doubt we are going to be spending money on the footprint, so there will be more investment in the business. I don't think it necessarily transforms the picture I showed you. I would not be trying to suggest to you that it just continues to kind of trend up from the right over the next ten years.

All the things we are doing on the footprint, supply chain, overhead structure and investment in the portfolio, I think, there is no doubt we can continue to earn pretty good returns on the capital base.

Christian Lockland (Bernstein): Just two questions please. When you talk about being a consolidator in the marine market, how much of that is through market share gains and how much through just acquisitions, say over a medium or long-term? That is the first one.

Then second question, focussing on marine services, what do you see as the main drivers of market demand for long-term service contracts in Marine, for example, in aerospace, airlines, like the certainty and predictability of what their service costs are going to be.

Do you see this industry shifting into it over the long-term just like Aerospace has grown into a predominantly powered by their structure?

Lawrie Haynes: Okay, thank you very much. I am going to ask Mikael to respond to both of those points. However, I think it was Sauli who mentioned that we recently acquired the permanent magnets technology. That was a small acquisition, but was very pointed, very focussed acquisition simply to deal with one part of the technology that we thought was very important when we are going into kind of Arctic and harsher environments. That is the kind of small consolidation that we see.

Perhaps I will ask Mikael to respond to the wider question.

Mikael Makinen: Okay. Thank you. Exactly, as Lawrie said, I do not think that a consolidator means that you have huge M&As, but it is technology that we have acquired. That is what I tried to say in my presentation. Then you go to intelligent ships; then you go to big data. That is the type.

As we said on the RandD side, it has more on today, but still very, very moderate. The future consolidator is not the one who has the hugest portfolio hardware. It is the one who understands how to use data to take care of that hardware.

And on the service, Andy, maybe you can elaborate a bit.

Andrew Marsh: On the service question, we definitely see that long-term service agreements and marine will take on the same sort of value proposition that we have seen in the Aerospace. It is risk reduction for the customer predictability and the cost structure they will have on services, but also some of the things that you heard mentioned in the innovation side and in Mikael's presentation about where the technology levels are going and where the crew sizes are going. The ship owners in the future are less and less able to do their own maintenance activity on the vessels. I cannot make a prediction for whether it gets to the same level as total cares in the aerospace world, but we certainly see it to be an increasing part of marine service market.

Lawrie Haynes: Okay, thank you.

Ben Fidler (Deutsche Bank): Firstly, one for Ulrich actually, maybe a two-part question to that: I know it is relatively early days, but can you outline what real tangible synergies so far that being owned by Rolls-Royce has brought to you?

Secondly, just looking at this year's trading pattern and actually last year's trading pattern, your business is extremely second half loaded, just to understand if you can help me understand, explain to us why has such a second half loading in terms of the profits compared to the first half profits?

I will come back with the second question.

Lawrie Haynes: Okay. Well perhaps on the integration, maybe I will give you an introduction, then we can ask Ulrich for his kind of reaction from that. I tried to give a bit of an outline in my kind of opening about where we see the synergies coming and lying.

Just to give you a bit of background, what we did when we acquired 100% of Power Systems, we brought together the small team, basically the team on this table with a couple of other people. Markus Bergmann who is the Strategy Director here, we got together. We said, okay, now we have 100%, what do we do about creating synergy values? We identified what we call lighthouse projects. We identified about ten lighthouse projects of which about eight were revenue generating projects and two were cost cutting exercises.

We have been working on honing those down. We have gotten down to about half a dozen now. I brought you through some of the ideas that came up. Let me just give you a quick picture of how I see it. The lighthouse project's engineering; that is what we do. We have seen very clear opportunities in using for example the Indian tune up facility that Power Systems has so that we can now integrate the marine people from Mumbai, from high cost areas into that facility, a very clear opportunity.

We have looked at technology, gas technology that is in the Bergen Engine. We have got a gas engine in Bergen Power Systems does not. The opportunity for us to use that technology to take it into Power Systems, this is a very clear one.

Fuel diversity, I hope you have seen this morning, is going to be one of the key issues going forward in the medium term.

Injection systems: L'Orange, we have got a brilliant injection system as part of Power Systems that we can now use to improve part of Marine.

Systems intelligence, putting the two business together with when we have got additional equipment and energy and health monitoring, gives us the level of data that we need to turn it to information and to sell in terms of intelligent systems.

The things that really stuck me about what we have acquired as part of our Rolls-Royce Power Systems is we have got a centre of excellence in Friedrichshafen for reciprocating engine. I think it is second to none. The opportunity for us to consolidate our whole thought process to our sophisticated engines in Friedrichshafen is very clear and very key.

We have also got in the Rolls-Royce Marine, in Norway, a fabulous centre of excellence in terms of understanding the offshore market, so the opportunity for people in Friedrichshafen to learn on the offshore market and look at clear opportunities there.

If you look at the Bergen engine, Bergen engine has usually been operating in the marine market. With the acquisition of Rolls-Royce Power Systems, in the land market it gives it further opportunity to sell Bergen engine on land.

The footprint: One thing that Power Systems has been doing is they have been development a footprint in China. Ulrich is developing engines in China. Rolls-Royce marine has a small facility just outside Shanghai. The opportunities to move those two businesses close together, to use those resources, these are obviously an opportunity.

If you look at the naval business, very close similarity between the customers that Ulrich sells to in Power Systems and that Don sells to within Rolls-Royce marine. Same customers using the same types of regulation for bidding, with the same types of product, and as I said in my piece, the admirals that I am talking to say, 'Please put me together because we would like to have a consolidated proposal from you.'

If you look at purchasing and the supply, we are only at the foot hills of understanding exactly what opportunities will come from a collective business on both purchasing and supply chain.

Another very small area, but it is all cost, it is all saving, is joint marketing. My first kind of entry into the marine market was to see two chalets. There was an MTU chalet in the north shipping under Rolls-Royce Marine, not sitting far apart. That was when there was a joint venture in Rolls-Royce Marine.

The opportunity for us to bring those together to put joint marketing opportunities out into the market but also cut costs in only having one facility is very clear.

The services, the distribution network that Ulrich has got, absolutely brilliant. Rolls-Royce Marine can learn a lot from that in bringing those services together.

And then of course the prioritisation, research and development and capex again clear synergy opportunities. I think most importantly, you heard from Mikael Makinen the approach of the three-pronged strategy.

One thing that I have learned a great deal of over the last couple of months is to bring a team together. When you bring a team together like this, they spark ideas of and come up with the view that you can have disruptive technology if we pool our labour and pool our knowledge. It is very difficult to put a value on that, but I think we are positioning ourselves very well for that kind of long-term kind of market opportunities.

So that was a quick summary. I will pass over to Ulrich and he can put some depth into that.

Ulrich Dohle: Well then, what else to say? Maybe one small thing to add on the practical side, IT systems is also something where we see future opportunities to improve the overall setup. We have been investing in most modern SAP systems over the last ten years, a lot of money.

I think Mark mentioned before that in the marine world, we have different ERP systems, which do not maybe communicate in all cases. There is something that we can bring to the party also.

Your second question is more difficult to answer. The question was why we are always back loaded in the year. I am five and a half years now with company. My sixth year where I see the phenomenon, and I really do not understand why it is that way.

There are some facts of course: we have governmental business, we have businesses that are due to be delivered always to the last quarter. And then we have marine business where we get orders some years in advance and we know that the ships are being ready for the engine to be built in in certain periods, which is normally the second half of the year. So we do, historically, 60% of our turnover in the second half, and we see the cash also comes in then.

So we somehow balance it out in the company and the factory by pre-building some components so we have an even load distribution during the year. But we always try to better smoothen it over the year. It is very difficult to do, obviously.

Ben Fidler[?]: I have come up with a second question was just possibly one for Mark, or picking up on one of Mark's summary points, which is: for the future decade you see growth continuing, the implication was, similar to the last decade. Maybe I am being a bit slow this morning, but just to reconcile: you have grown your top line 8% CAGR over the last decade. you are talking about offshore, which is 42% your own market, growing 3%; marine, which is 10% of your sales, growing at zero to minus. I was not an 'A' grade at maths, but the weighted average does not sound like 8%. Or am I misunderstanding what you were trying to say?

Mark Alfatt: No. I think you probably were an 'A' grade at maths, Ben; I think you do yourself a disservice. The point I think came out through the presentations this morning and the points around the opportunity and even just some of the points that Lawrie's just touched on. There is no doubt when you look at this sector:

the challenges are getting tougher. The broader industry challenges are getting tougher. Increasing environment legislation. Some of the challenges of operating in deeper waters are creating more opportunities for this business than we had when you go back to the start of this timeline; there is no doubt about that.

The opportunities which we see coming out of the relationship with Power Systems as we integrate those businesses. And I think the final element we touched on a couple of times, just around the Services model. Services is only around a third of our business today. I do not think it necessarily reaches the 60% plus that you see in Aerospace, but there is no doubt it can grow. It can grow as we take more advantage of the service network; both our own, and what is in Power Systems. It can grow as we get more capture rate of our own vessels and more capture on the vessels. So I think there are a number of areas where we are still in the early phases of actually capturing what is out there.

So I hear what you say about the fundamental markets. But those areas we are going to be able to extend into and I think driving the business service model is clearly a big opportunity for us.

Lawrie Haynes: I would also go on to say that in my short talk I talked about the delivery, and three years ago we were delivering original equipment at 30% and now 92%. One of the things that John Rishton has been really clear about is responsiveness in the customer: if you deliver 90% plus every time, then your market opportunity goes up. We were delivering at 30% and still winning market share. So the opportunity is there that if we can continue to replicate that, which I believe we can, and improve, then that market opportunity is widened.

Thank you. There is a question here, and then we will come onto the webcast.

Tristan Saint-Saens[?] (Exxon): Thank you. In offshore, can you give the split between echo-handling PSVs and other business? I am not sure I got it from your presentation; the split of revenues between anchor handling and PSVs and other businesses.

Second would be, can you give us a feel on the margin mix between the various activities. Between naval, merchant, anchor handling PSVs, which one are above divisional margin, which ones are below?

And a final question on pricing in the industry: is it a circular trend of annual, small pressure on pricing? Is pricing cyclical just like volume? Is it going up every year like for [inaudible], like in [inaudible]? How should we look at it? Thank you.

Lawrie Haynes: Okay. Thank you very much. Interesting question. So I am going to ask John to address those. I think the first one is anchor handlers and PSVs.

John Knudsen: In general as a comment, it is difficult to split in one year. So I would say it fluctuates from year to year, and some years the PSV is big and then the anchor handling becomes big. What we have seen in the last year now is that now the PSV has been quite big, now we believe the anchor handlers are getting big and the subsea construction. To go into details and split that is very difficult. When it comes to the margin picture, normally on the high-end of the equipment, then there is normally a better margin than when you come in small to the commodity. And in our world, the PSVs are more commodities than an anchor handler, for instance.

To go in to do the split sale[?], it is the same answer. And when it comes into the pricing mechanism, we are definitely business people, so in a high peak we definitely want to get maximised value and in the tougher conditions, we take what we can. But of course, the key market share is also important. And what we have demonstrated today, hopefully, is that this is a through-life business model that goes over 25 years. And I can promise you that we do not take contracts if we do not see an overall sound business.

Lawrie Haynes: Okay, thank you. Gerlinde[?], you have a question on the webcast?

Gerlinde[?]: Yes. A question from Nick Cunningham at Agency Partners. And it is a question on the price of oil. 'At what barrel price does a significant part of the offshore ENP that is currently planned become unattractive and start to impact your end market volumes? Conversely, is there a barrel-price range which favours offshore above onshore?'

Lawrie Haynes: Okay. Thank you very much. Michael, do you want to respond to that?

Mikael Mäkinen: First of all, if you start with oil prices, nobody can, of course, match Saudi Arabia where it is \$2.50 a barrel. That is the lowest range. And the highest range is then the unconventional oil where it can go up to \$80 to \$100. And offshore is somewhere between \$45, \$65. Then if you go over to Arctic it can go further up. But it really depends on the area where you are; it is not only dependent on the water depth. It depends on the area. It is more expensive outside Brazil because you have to drill through 20 metres of salt, and so on and so on. But we are still today the oil price is far above that.

Lawrie Haynes: I think, as well, my response to this question is that we are looking at this as a long term, thirty-year programme. There are various people who are not just looking at the short term when it comes to investment; they are looking at a much longer cycle. So it is not directly appropriate to say, well, the oil price has come down this week and is therefore going to impact on the long term.

Mikael Mäkinen: No, I mean, if the oil price is below \$50 for two years, then it would have a definitive impact.

David Perry (J.P. Morgan): If I just go back to your July guidance, rather than the guidance from Friday, for Marine you were guiding to sales down 10% at constant currency, and Power Systems around flat. Wärtsilä at that stage was still guiding to +5%, and your big CO, John Rishton, made some quite open, candid comments back in February about market share and the need to have more medium speed diesel to cross-sell the equipment. So are you losing market share, and does that correlate to Mark Alflatt's comment about this Marine business having been under-invested over the last ten to 15 years?

Lawrie Haynes: Okay. Thank you. I think in terms of the general view, what we have seen in the last few months is actually a degradation, particularly in the very short term market – the spares market and the upgrade market – and as Mark said earlier on, there is a very limited visibility on that side. That is where we have seen some of our customers. All we do is react to our customers. We are not a market maker in this sense. We react to our customers, and that market has come off over the last few months. I think that is one of the key issues, if you like, over the last year, from the half year to today.

I am going to ask Mark, perhaps you could respond to the wider question there.

Mark Alflatt: In terms of market share, I guess, David, that you were getting at, one of the observations I think we tried to get across and it came out in two or three places today, we have got a very wide range of product that we do, more than 200 different products across vessel sections. So being able to look at individual sections and say well, are we doing well on market share there, there or there is quite difficult to turn that into something that is really useful to you because in any given year, you will have a certain number of vessels ordered. Even John just touched on, we have had a number of good years for PSVs, but anchor handlers have been relatively small. So you might look at market share for anchor handlers and say, well, actually Rolls-Royce did really well on anchor handlers, but there were only 20 vessels ordered. So looking year-to-year at market shares does not necessarily tell you the picture.

I think in terms of, at least on the Marine piece – I will let the others talk about the Power Systems piece – within the July guidelines, in terms of what was happening to revenue, part of that was reflecting – we could see last year, coming out of 2013, that we had seen a slow-down in the offshore sector. We could see that in the order book. We could see – we expected that to hit this year. So that has been part of the picture this year. I do not think that necessarily tells you about the market share on the offshore piece. I think it is

just telling you there was a slow-down in some of those vessel types, and we could see that coming through the OE revenue line.

The other element is what Lawrie has exactly said. The aftermarket piece is a timing materials business today. Customers have more discretion about the timing and placing of those orders, and it has been slower. That is the nature of the marketplace.

I think it is quite difficult to say we are losing market share across these ranges and that has impacted the 10% down. I think it will cycle across some of those vessel types, which we could see coming at the end of last year. It was in the comments we made.

David Perry: Can I just ask one follow-up for Sauli, please.

Maybe I misunderstood it, but if I go back to the four years ago presentation and other work I have done, I thought we were on the cusp of a big wave of new regulations on emissions coming in around 2016, and that was also why Tognum had been spending a lot of money on a new family of diesel engines.

In your presentation, you did not seem to refer to that. You talked about something out in 2025. Have I got it wrong, or is there some regulations coming right now that is going to drive demand for new equipment?

Sauli Eloranta: There was this NOx regulation that was postponed. The whole industry was preparing for that Tier III introduction, and I think it was 1st January 2016 when it was supposed to come in force, and it was delayed. That is also just for new builds, and today, you have a downturn in merchant shipbuilding, so that is also, how would I say, not impacting that many. The number of annual new builds is lower in merchant shipbuilding than it has normally been in the peak years. That was maybe the thing.

The one being posed in 2020 is the global regulation for sulphur emissions that that was referring to. Sulphur emission is, in a way, impacting the entire fleet of 130,000 vessels in the world, so that is a massive change, compared to this NOx thing which is impacting new builds. Of course, for new builds, that is a massive change if you want to go Tier III compliant.

Mikael Mäkinen: I would like to add to that because for us, the picture is much more diverse. We see different emission legislations in the segments of marine, different from construction/industrial equipment, different from power generation, and again, different from special areas like rail and locomotive. These emission limits and the introduction dates are, again, different in the different area of very regulated companies. EPA-controlled are different from the one in Europe.

Basically, the Tier IV emissions started 2012 with Tier IV interim in the EPA, and then it was followed by Tier IV final in 2014 and 2015, depending on what area you are talking about. For Europe, we just have seen introduction of emission, Stage IIIB for locomotives in 2012 and for small engines, now, in 2014. So we had a big pre-buy effect in 2013. For what Sauli is referring to, the IMO legislation that was actually postponed from 2016 to a later time was not fully adopted by all countries. The United States, for example, insist to have this legislation being implemented in 2016 around the coastlines of their territories. So if you want to enter the environmentally controlled areas around North America, you need to comply with the same emissions that would have been necessary on a Tier III. So if you are Tier IV, Tier IV applies there. So we have to have engines available for this emission legislation.

It actually has been the key driver in the last, let me say, ten years for us to renew all our engine lines – small ones, big ones, very big ones – to make them competitive with emission legislations that have been started to be implemented in 2011, 2012 and will continue through 2016. Now in Europe – sorry, I have to add that we are talking Stage V, which will be implemented from 2019, 2020, and 2021 depending on the power range that you are on. So we are constantly, basically, working on solutions to make our engines fit for these restricted markets.

Lawrie Haynes: I think I probably will just follow on from that and just ask Ulrich as far as I understand it – and I am not the expert here; Ulrich is – this is an on/off switch. If you do not comply with the tier regulation, the IMO regulation, the environmental protection area regulation, you cannot sell products for that market. I just wanted to perhaps –

Ulrich Dohle: Yes.

Lawrie Haynes: So it is a necessary investment that we make in order to be in the market. It is not a question of well, we will do this because we think the customers want it; it is a requirement.

David Perry: Just to follow up on that, you said there was a lot of different regulations, it is obviously much more complicated than I am suggesting it is, but it just seemed to me that a big part of the Tognum investment case was you have clearly spent a lot of R&D over the last six, seven years; your new family of engines is ready now. Yet it seems as if it is not mandatory to buy those engines in large parts of the world. Is that a fair assessment? Does that change the business plan, at least near-term, for the engines you have been developing?

Ulrich Dohle: To a certain portion, you are right. We are selling the majority of our engines into not-regulated countries. That is where the old generation of engines are still being produced and are available and can be sold.

However, if you want to play in North America, in Europe, and if you want to sell your engines into these areas, you have to have engines available that comply with the latest and most stringent standards. Basically, we have everything in our portfolio, and it is just a question of time when other countries, like China, for example, will follow emission legislations that are being applied in Europe or in the U.S. We see this happened for on-road applications, for trucks, for passenger cars. The same is taking place and going to take place in countries like China and India which are big markets for us. So I think we are well equipped and we are well invested in having the latest technology available.

The one thing is that our main competitors also invested heavily in new technology engines, so unluckily, the prices of engines go up with much more technology, but it happens to all our competitors, so I think we are in good shape there.

Lawrie Haynes: Okay. John, do you want to comment?

John Knudsen: Yes, just a quick comment directed from the market side. I really do believe that when you reference to China – for instance, pollution in China – that will also be key demand from these kinds of countries. So when the IMO Tier III, or whatever we call it kicks in, it will have a big geographical spread than what you can foresee in 2016.

So to be prepared for that future, I believe, is a strong benefit because it is not only about the engine; it is about the complete system that works proper. Then that should be operating in even harsh environment, as well. So there is a pro and there is a con for this matter.

Lawrie Haynes: Okay, thank you.

Romeo (Investec): Romeo [inaudible] from Investec. Got three questions. Mark, when you started your presentation and you commented about seeing Rolls-Royce externally in your perception and after being here for five months in the business. How do you perceive the business particularly as to your competitors and best practices? What do you think – how do you perceive the gap to best practice to be on operations?

Second question for Mark is, thinking about the cost savings, you describe an opportunity which would suggest more than £100 million of cost savings. Trying to think about – I imagine there are some pricing pressures that are going to offset some of that, and maybe other things that we have not identified that could offset some of that cost savings.

And lastly, relative to the beginning of the year, your customers have deferred their services. I am sure you have had conversations with the customers. From those conversations, what is causing them to defer some of those overhauls and some of the upgrades? If you can provide some of that quality to your commentary, it would be helpful.

Lawrie Haynes: Thank you very much. I think what I am going to do is ask Andy, again, to respond to the last question first on services; you will get direct knowledge from the person that is at the front.

Andrew Marsh: Yes, this is always difficult because I stand up after the question is asked, and I cannot tell who asked the question, so I do not know where to look. Okay, thank you.

Yes, in terms of the customer feedback on some of the deferrals, there is a variety of reasons, of course, that go on, and typically it has to do with their ability to secure contracts for their vessels; in some cases, just a matter of timing; two three months takes us over to the end of the year and into the following year, that sort of thing. I would not say there is any major trend going on in the deferrals that we have seen, where we have seen them, but typically, it is related to timing of the contract they have in the vessel that they want to get.

In terms of upgrades, it is a little bit different because upgrading a vessel or a rig will sometimes take it into another category of marketability for our customer to take to their customer. As Mark pointed out, I think there is a lot more discretion in how they spend their capex money. On the maintenance requirements that they are deferring are typically coming out of their operations and maintenance budget, and the upgrades that they want to do are coming out of a capital spend budget, out of a capex system. A variety of reasons, but in principle, on the ones I think you are referring to, I think it has more to do with their ability to get those vessels on contract, themselves.

Lawrie Haynes: Do you want to respond to the cost savings question?

Mark Alflatt: Yes. I guess your question was driving at, well, what is that going to do to margins. I think maybe if I can go back a stage, because the things we are putting in place now are not new initiatives we have kind of chased over the last six months or 12 months. When we started to look at this picture two or three years ago, it was clear that we needed to transform the cost base, and we set out with a number of opportunities around the structural part of the cost base, so footprint, the way we were organised, the elements I talked about in overheads, in terms of systems, and then the sourcing points I touched on in the end with engineering and purchase.

We had set for ourselves an objective for, at the time, around 15% of the cost base. That is what we felt we needed to do which, on a steady-state base, was somewhere around about £300 million of cost over a number of years to drive that competitive offering. That was against an environment we were seeing particularly on the OE side of volumes falling and prices under pressure. That is the kind of framework we set out with. Then I have showed you the progress and the various elements. Your 100 million is about right for some of the spend, for example.

If you look at the business today, I have said there were going to be some minuses, as well as some of those positives. Pricing is not getting any easier. John talked about the environment, particularly on offshore; I think it is fair to say the merchant sector is still pretty challenging. Volumes are still pretty difficult and pricing is pretty aggressive. So I think pricing is a negative this year. I think the kind of things that we are seeing in the market in many of our OE businesses is still pretty difficult in a pricing environment. I think you should expect us to spend a little bit more on R&D, so that will be a bit of a burden on the margin.

However, I guess when I add them all together, the things we are doing on the structural cost, on the footprint, on the sourcing changes, on engineering, on overheads and systems, and I think there are some opportunities in all of that. Then we overlay the opportunities we will get as we kind of consolidate and integrate our Power Systems and land and sea.

A big driver as you are seeing this year, in terms of mixes, is the aftermarket, and that tends to come with a higher return. There is no doubt, when we look out over three, four, five-year periods that these current range of transformation programs are going to run, there are more positives than negatives, absolutely. At any point in time, frankly, it is going to be reasonably balanced by the revenue mix, and that is part of what you are seeing this year.

Lawrie Haynes: Okay, thank you. Mikael, I know we are running out of time, so a quick commentary on your experience.

Mikael Makinen: Yes. On my experience, I went through a few items in my presentation, but if you really look at it, innovation and engineering I think – or VR board class – now I am talking about the marine industry. As Mark said, we need to spend a bit more to get a number of new generations of our products.

Agility, I think that there, we have a way to go. By agility, I mean reacting to the market, changes in the market, but also in implementing effectiveness measures. I think that that is an area where we could be faster.

Customer focus: very good in certain markets like Norway, for example, but maybe not worldwide as customer-focused as we should be.

Then, we were talking about Asia, that we need to be stronger there.

Lawrie Haynes: Okay. I think we have time for one more question.

Speaker: In days of yore, when we were Vickers and we had all the synergies with battle tanks and baby incubators, selling the UT design was regarded as the way of pulling through our product. Latterly, we have – I know we are going back – started talking more about the engines as being the pull-through for the product. Which of the two is it, or is it both, or is it some combination?

Lawrie Haynes: The answer is it is both. It is interesting, when we go – sometimes we go to the owner. They all specify – they will identify what products they want, and sometimes it could be they want the Bergen engine or a particular high-speed engine and then the rest pulls through. However, quite often in the market, we are finding that our tech machinery, some of the great components that we have got and people will see later on, that is the pull-through for us, then to sell the engine. So it is both. Okay?

Mikael Makinen: Yes, just a quick comment on that. Any shipbuilding project starts with the engineering, starts with the design of the ship. Whether you call it pull-through or not, if you are into that design phase, you are interfering with the customer at an earlier stage than when they start buying components. It might be that then the real pull-through is then the engine in the end, but you get into the project earlier with the design. So it is both.

Speaker: This is quick. So if I sense that there are fewer UT designs selected in a year because they have gone to Ulstein or VAD[?] or someone, should I be alarmed by that, or should I sort of just regard that as life?

Lawrie Haynes: John, what do you think?

John Knudsen: I do not think you should be alarmed at all. I think that we have two different approaches. One is definitely to sell the own UT ship design. The other one is, which I showed you earlier today, that we have 70, 75% of the winches on an anchor handler. So this is really about the blend of the margin and the volume, and I think we have to accept that we are also building up ship designs, groups inside their yards. So it is really about making sure that you win when it comes a yard and their own ship design that we win the packages, and if the customer comes and asks for UT design, we give them, then, the complete offerings. To me, that is business; it is just to make sure that we are in good conditions for two different business groups.

Speaker: Okay.

Mark Alflatt: Sorry, if I could just add to that, if we look back at John's business for the last 18 months, the tenders you have been winning have been as many about where you are designing as where you are providing equipment onto other designs. So you have won in both of those spaces, I think.

Lawrie Haynes: All right. Well, thank you very much. I am going to conclude now. If you do not mind, I am going to thank my team very much for their efforts both in preparing for today and their presentations. I hope you found them useful, beneficial. Part of the intent of the day was to partly educate you to what the marine market is. I hope you found that beneficial.

So with that, I would like to now conclude the webcast and close it down. Thank you very much.

[END OF TRANSCRIPT]