HOUSE OF COMMONS

Scottish Affairs Committee

Oral evidence: Industrial Transition in Scotland, HC 729

Wednesday 18 June 2025

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Watch the meeting

Members present: Patricia Ferguson (Chair); Maureen Burke; Dave Doogan; Lillian Jones; Mr Angus MacDonald; Douglas McAllister; Susan Murray; Jack Rankin; Elaine Stewart; Kirsteen Sullivan.

Questions 50 - 95

Witnesses

I: Sir Simon Lister, Managing Director, BAE Systems Naval Ships; John Howie MBE, Chief Corporate Affairs Officer, Babcock International.

Examination of witnesses

Witnesses: Sir Simon Lister and John Howie.

Q50 **Chair:** Welcome to this meeting of the Scottish Affairs Committee, where we are looking at the industrial transition in Scotland, and specifically the future of shipbuilding. This session is specifically about defence shipbuilding, and we would like to welcome our witnesses, Sir Simon Lister and Mr John Howie. Could I ask you first, Sir Simon, and then you, Mr Howie, to introduce yourselves briefly and say who you are and what you do?

Sir Simon Lister: Good morning. I am the managing director of BAE Systems Naval Ships and I run the Govan and Scotstoun shipyards, among other facilities on the Clyde.

John Howie: Good morning, Chair. I am chief corporate affairs officer for Babcock International Group, responsible for our corporate strategy and export programmes. Previously I was chief executive of our marine business, including the Rosyth site.

Q51 **Chair:** Thank you very much; that is very helpful. How have Government initiatives like the national shipbuilding strategy contributed to the overall health of the sector? We will start with Sir Simon.

Sir Simon Lister: The national shipbuilding strategy has generated a very welcome focus on the industry as a whole. It has escalated the point that continuity of shipbuilding in an industry like ours is a very important feature to create. Because the Government is largely the architect of the order book, it is a very important feature of the order book that that continuity is maintained. It gives us in the shipbuilding sector the chance to build facilities, the skills, the productivity and therefore the competitiveness, so it has been very welcome indeed.

John Howie: I agree with Simon. I am slightly biased, because I co-chaired the Shipbuilding Enterprise for Growth when the NSO was first set up. Shipbuilding is naturally a cyclical industry, and the trade skills that you need through the design and build of a ship vary. One of the things that industry needs as a result of that is certainty—certainty to invest in skills and in infrastructure and design tools—because it is a long-term business.

As Simon said, the national shipbuilding strategy clearly signalled from Government, which is the principal customer for the industry, that 30-year pipeline that allowed us to start to think about how we invested. It also resulted, in our own case, in the Type 31 frigate programme. Historically, the Government would have ordered a first of class ship, seen how that went and then ordered another batch, but it is quite hard to invest on that basis. Having an order for five ships at the same time gave us the ability to invest in the regeneration of the facilities at Rosyth, and from that point of view it has been really important.

Q52 **Chair:** That is very helpful, and you have pre-empted my next question, which was going to be about how the pipeline of orders and so on set out in the strategy would be beneficial to your organisation. I will ask Sir Simon that one.

Sir Simon Lister: We are very grateful for the order for the Type 26 frigate. We have five of those in build at the moment and the first, HMS Glasgow, was named just three weeks ago. We have an order book for eight, which, to John's point, gives us that certainty, and we have been able to invest in facilities significantly over the last five years. Some £400 million of investment has gone into the building, machinery and, importantly, the team doing the work. That is enabling us to achieve levels of learner from one ship to the next, which will meet the Government's ambition for a productive sector.

More than that, we have been supported hugely by Government over the years in our export drive. We have seen the design of the Type 26 exported to Canada and Australia. Versions of the Type 26, with our support—our engineering support in particular—and all the supply chain implications of that, are now in production in Australia and Canada. That has resulted in significant interest from other European countries, and we have been helped by the Government in pursuing further orders in Europe.

Q53 **Elaine Stewart:** What is your assessment of the strategic defence review and its vision for UK shipbuilding and naval capability?

Sir Simon Lister: It is very welcome. The refreshment of the defence strategy in the SDR document is very clear. The naval component of the SDR makes explicit the need to maintain, increase and modernise naval strength, and also modernise the way that ships are procured in line with the national shipbuilding strategy, and then make sure that data and digital components are connected in the shipbuilding world. It is really welcome.

We wait to see the detail of the defence industrial plan, but the headlines are certainly encouraging for industry. Some of the tone about the renewal of procurement and procurement strategy, in terms of long-term relationships and early discussions about procurement strategies to adopt to achieve best value and best pace in procurement, is all very welcome, and we look forward to helping those get implemented.

John Howie: I would echo that. As a company we think that the new SDR is really valuable. It is well written and having outsiders looking in brings a different perspective to it. It does two things for us, helpfully pointing a direction of travel: it makes the point about the need for continuous shipbuilding, which goes back to that investment point, but it also starts to talk about the changes in technology and the use of simpler, more cost-effective vessels with greater use of autonomy, and so on. That signals to us the what, if you like—what it is the customer wants.

As Simon said, the change in procurement philosophy is probably going to herald the biggest change in the way we procure defence products since the original Levene review. We do not underestimate the scale and the complexity of that for the MOD, but if we can get that reduction from an average of six and a half years to procure a complex system in the MOD to no more than 12 months, not only will it be great for companies like ours in trying to plan, but it will make it much easier for small and medium enterprises to afford to be part of the defence enterprise.

Q54 **Elaine Stewart:** Are there any elements that you hoped would be addressed in the review but were not?

John Howie: As an industry we always naturally want more detail, do we not? In the geopolitical world we live in it is very hard to write a strategic defence review: there is a risk it will be out of date the minute you write it because things are moving so quickly. Industry will always want the maximum amount of certainty, but we do recognise that there has to be a balance struck that leaves the Government room to manoeuvre as world events evolve and, as we can see, they are evolving pretty quickly.

Sir Simon Lister: It is a strategic document and we welcome it for its strategic clarity. While more detail may have been wanted by some, we know that detail is to come and needs to be elaborated properly. The strategic imperative is very clear indeed, and that is welcome.

Q55 **Dave Doogan:** Sir Simon, the original prospectus of about a decade ago was for 13 Type 26s, and the firm order that materialised was for eight ships. Taking two things into account—the lessons you have learned on first in class and the improvements that have been made to the means of production, and the changing geopolitical situation in the Euro-Atlantic, which will be the home of the Royal Navy's 26s—how optimistic are BAE that there can be a valuable conversation with Government that would see that order increase from eight back up to 13? You cannot pre-empt that; I am just trying to understand your analysis of what has changed, how proud you are, how you can evidence that pride in the quality of the 26 as a product, and what is happening in the wider world in terms of how that might unwind into order likelihood.

Sir Simon Lister: Our sense of mission in Glasgow, on the Clyde, in building an anti-submarine warfare frigate of this capability has been deepened and strengthened by the SDR in particular. It has made it very clear that the north Atlantic is a very important theatre in which cutting-edge capability has to be deployed. Whether that will translate into more Type 26s to supplement the eight already on order is for the Government to decide, but we stand ready for that dialogue.

As you would expect, we are in dialogue, as John is, and we are in dialogue together with Government, about shipbuilding capacity and how best to advance the production capability to meet emerging needs. What we see in the SDR and in our normal dialogue with the Ministry of Defence is a need to replace the above-water capability next, so I would

expect that dialogue to advance before further anti-submarine warfare capability is procured, but again, that is for the Government to decide. We will be involved closely and together in the debate about what that capability looks like, how we can respond to the emerging requirement and how we can combine forces to deliver it.

Q56 **Kirsteen Sullivan:** I understand that the Type 32 frigate was announced by former Prime Minister Johnson in November 2020, and there was a further announcement in September 2023 by the then Minister for Defence Procurement suggesting that the Type 32 would enter into service in the 2030s, but that did not feature in the strategic defence review. Had you expected to see detail of the Type 32 frigate in the strategic defence review, and do you have any views on that?

John Howie: Since it was discussed in the early days, we probably took a different view on it from the one that was articulated publicly. If you look at the way the US procures warships, it builds them in what it terms flights: a batch of maybe five, six, seven or eight ships, then an insertion of new capability, and then another batch. You might argue that it was in our interest to think about it this way, but we always saw Type 32 as a technology evolution of Type 31, in effect, with an aim that perhaps it would have space for more autonomous systems, or it might have a stern ramp to help with amphibious operation. We have always seen it as a Type 31 batch 2, and our planning assumptions were based on that.

The reason I say that is that when our CEO joined us, he took an interesting approach to Type 31 and said, "Stop thinking about it as a programme and start treating it as a product," because as a product you think about how you develop technology upgrades and use automation to minimise the cost and improve the speed of delivery. In that mindset, Type 32 looks like another batch of the same ship, but with modifications made to adapt to changing naval requirements.

Q57 **Kirsteen Sullivan:** Thank you for that response, but Type 31 does not feature in the strategic defence review either. Do you have any comments on that? I understand they are currently being built in Fife.

John Howie: They are, yes. It does not really concern us. What we saw in the SDR was the Government signalling, as Simon said, the importance of the High North and the threat from Russia, but also the importance of the Asia-Pacific region and the continued need for what we call constabulary operations: the drug-running and anti-piracy.

Type 31 exists to fulfil a very different role from Type 26. It is intended to be a general purpose frigate and is deliberately large to be flexible and adaptable, but it is going to serve most of its life in those regions where it is part of the UK's security posture, rather than having very specific anti-submarine warfare-type capability like Type 26.

Q58 **Mr MacDonald:** We have all seen that the Black sea fleet has been effectively driven out of the Black sea by naval drones and things like

that. Are our ships any better than Russian ones to counter a change in warfare?

Sir Simon Lister: You may know that I was a naval attaché in Moscow for four of my 40 years in the Navy, so I have a very good knowledge of the Black sea fleet, its capability, its basing and its transition after the collapse of the Soviet Union into the hands of both Ukraine and Russia.

I would say that the drone threat at sea and the asymmetry of modern warfare is something that the Royal Navy and UK armed forces have adapted to much better than our Russian counterparts. This would be something for the First Sea Lord to comment on, really, but as an ex-naval officer I look at the deployment of the carrier strike group into the east, passing through some really quite challenging environments, including the exposure to drone threat, as something that the Navy has countered extremely effectively with industry support. I do not think there is any room for complacency at all, and the SDR points to the drone threat as something to focus on and bring capability rapidly to bear, but I see that already happening, and with increasing pace, in the United Kingdom.

John Howie: As a nation we have probably been a bit surprised at quite how the Russians have attempted to fight the Ukraine war, and we therefore assume that that says something about their wider military capability. Some of their submarine technology is genuinely world class. I know a bit less about their surface fleet, but their submarines are probably the pinnacle of their operations, and that is probably where the biggest threat for the UK comes from, given the reliance we have on subsea cabling and other critical infrastructure.

Q59 **Susan Murray:** How confident are you both in your ability to deliver the capabilities outlined in the review, given the uncertainty on when the 3% defence spending target will be reached?

Sir Simon Lister: Without any sense of hubris or overconfidence, we have a fair level of confidence, but we have challenges to overcome and most of those are around skills. In the yard we often say that the biggest risk to successful delivery on time and to budget is actually ourselves: our ability to grow the workforce at the rate necessary to respond to the order book. That is why the national shipbuilding strategy is focused on skills, but we have too on the Clyde, where we have built an academy. That academy is much more than a finishing school. It does augment the skills and the output from the local college network that we make heavy use of, but it is an academy for everyone, from the managing director to the shop floor, because we all have to develop our understanding of how to take shipbuilding to the next level of efficiency and pace. We are confident but really quite aware of the risks that we have in hand, and we are working very hard to mitigate those, with good Government engagement and support, from both Westminster and Holyrood.

John Howie: I would echo that. One of the things we have been very clear on is that it would be wrong to look at the forecast for increased expenditure on defence and assume that that is going to be all our Christmases come at once and there will be loads of money to pay for everything. Defence will have to make sure it delivers value for money to the taxpayer. Given the skills challenge that Simon rightly highlights, in having those product-type shipbuilding programmes, we have invested heavily in automation and robotics, where we can take some of the low-skilled activity out. As an example, it takes a long time to paint the hull on a frigate and we are about to trial hull-crawling robots that will do the painting during silent hours and without the need for people. We have used robotics to get levels of productivity that are way higher than we achieved even during the build of the aircraft carrier, which was a new high point for UK shipbuilding.

The next generation of shipbuilders are very IT savvy. Coming into an environment where welders drive laptops and robots rather than crawling around in dark spaces—the traditional image of shipbuilding—makes it easier to attract people, but there is no doubt that there is a challenge in bringing people in. As part of our social value commitments on Type 31, we created a production support operative programme that specifically targets people who are not in employment, education or training. We have been really successful finding people who were out of the workforce, who needed a new start and a fresh career—cleaners who have become electrical assistants, and so on. That takes people out of the benefits system. That has been so successful for us that we are going to run it across the rest of our business where we have large, complex sites. But yes, I would say the thing we are most focused on is skills, because the movement of people is probably more challenging than it has been historically.

Q60 **Susan Murray:** Given the challenges in the environment that you are talking about, do you think it is possible to deliver the recommendations of the SDR without certainty on defence spending increases? You are talking about developing IT and other skills and your social responsibility, clearly all really benefiting the economy, but practically, without certainty on defence spending, are you still going to be able to deliver?

Sir Simon Lister: From a shipbuilding perspective, we have very good clarity on our forward order book. On the basis of that, we are able to invest at the rate necessary to build the capacity to deliver that, and I am confident that that is the case. We still have to work on every angle of building and modernising skills, including, as John has said, opening up pathways for the economically inactive to get through into the shipyard to a career that they might have felt was closed to them but actually, through contact, opens up pathways that perhaps they had not realised.

There is significant untapped potential, and we are learning, in some cases from each other, about how to tap into those routes to improve the skills base. We have good partnerships with the colleges, with the

advanced manufacturing institute and with the universities to take on the modernisation and automation robotics that John has described. On the Clyde we have just installed a new panel line, which produces steel panels—the basic building blocks of ships—with half the labour input and at almost half the cost of the previous system, which was 20 or 30 years old. The welders have stepped back and are now controlling the machine from a distance of 20 or 30 metres, which gives huge wellbeing and health benefits to them and makes welding that much more attractive to the next generation too. While those skills remain essential and we will continue to train them, we are making shipbuilding much more accessible both in the way that we conduct it and in the way that we create pathways through to it.

John Howie: Back on the theme of that productivity piece, BAE in Glasgow is going to be building the most complex advanced frigate in the world, and in Rosyth we are building five frigates from contract award to completion in 10 years. No other shipyard in the world is doing that. The message is that because of the certainty that the national shipbuilding strategy gave us, the UK now has two shipbuilding facilities that are at the top of their game, and if they were here I suspect the MOD would say they are probably some of the best in the world.

We know we can deliver. The opportunity for Government is, as you build the learning benefits through those programmes, the real value for money for the taxpayer comes in putting more work through those yards when they have hit peak run rate, because that is when you get real value for money. We are building ballistic missile tubes for the US submarine programme. We were originally one of five bidders—four American companies, one UK—and we are now the only bidder. We invested in automation when our competitors did not, and that gives you levels of world-class performance, in both quality and delivery.

I am really confident that industry can deliver. As I said earlier, one of the challenges for the MOD is to recognise that, against the budgetary settlement, they have a significant transformation activity to go through to make sure they are enabled and can deliver within the budgets. That is a journey we need to take with them: the three-pin plug needs a three-pin socket, as it were.

Sir Simon Lister: Continuity is extremely valuable in shipbuilding, both in the engineering effort required to design a ship and in the skills required to build and integrate a ship. Those skills are developed over time. I am sure it is the same for John: the last ship of his five will be 20% or 30% cheaper to produce than the first. There is something about trapping that 20% in the way that we procure ships in this country for the long term, by assuring continuity of effort so that the green labour risk is minimised, but then evolving designs into the requirement that is next needed. That is a very productive area to pursue. It is highlighted in the SDR through discussion of the relationship with industry that would facilitate that evolution and continuity.

Q61 **Dave Doogan:** BAE and Babcock have extensive operations, and they used to have extensive shipbuilding operations elsewhere in the UK. Both companies have made astonishing investments in Rosyth and on the Clyde. What is your assessment of why complex warships for the Royal Navy are now built in Scotland alone?

Sir Simon Lister: It is to do with clustering skills in one location and trapping the virtues of that. It relates to the previous point about continuity. As I have taken you around the yard, you know what it is like: four or five generations of shipbuilding are represented in many people in the yard. That creates an innate understanding of what it takes to build a ship. It does not hold us back. We have a workforce that is really keen to modernise and be at the forefront of shipbuilding, but that heritage is at the back, on the shoulder, of everyone on the Clyde, and that has helped us build what we increasingly see as a cluster of skills.

The circular economy in Glasgow around shipbuilding is beginning to build. We are outsourcing steelwork to Ferguson's to cope with the demand, and our colleagues at Malin on the Clyde are working well with us; they help both of us with our ship handling and transport. Those skills that we can tap into increasingly effectively are valuable. They give us a centre of gravity, a weight and a continuity, which is important, but they also create a foundation for people to come to the Clyde, settle, grow their families and have a career in shipbuilding for a good long time, and that is so vital. Certainly in the central belt of Scotland, if you wanted to be heavily involved in complex warship building on the Clyde, the confidence that comes from that order book, that attitude and that approach generates its own virtues and momentum, and I see that increasingly.

John Howie: Our journey is quite different, because in some senses our focus on shipbuilding came from a lack of confidence, which sounds like an odd thing to say. I was the MD of the Rosyth site probably 20 years ago, and Rosyth long lived post the privatisation with a concern that the work would run out and that we had to be more competitive than the yards in the south of England—principally, Portsmouth and Plymouth as refit yards, which is Rosyth's origin. That drove a particular mindset: "You've got to be better. You have to be cheaper, you have to be faster, you have to be better."

We got into the aircraft carrier programme because the size and the flexibility of the infrastructure at Rosyth made it a good place to assemble those large warships, and we realised that the refitting skills that Rosyth had honed over decades were applicable in the shipbuilding world. As the size of the Royal Navy fleet reduced, there was not enough work to keep three dockyards fully utilised all the time. Type 31 was a recognition by us that the Navy needed to spend more of its money on new warships than very expensive life-extension programmes on very old ships that were often past their design life.

We come at it from a different angle from BAE, but we have seen the same attributes in the workforce. Shipbuilding gets under your skin. When we did the float-out of HMS Venturer, you could see the pride in the workforce. They like to show their families what they do every day.

I do not think there are any particular skillsets that mean it has to be done in Scotland, but there is something about the origins of shipbuilding on the Clyde, which was the world centre for shipbuilding for a long time, and Rosyth's history as a yard that was fighting for its future after the end of submarine refitting, and used the culture that created to apply it in a different way.

Q62 **Lillian Jones:** The strategic defence review places strong emphasis on the integration of emerging technologies into naval capabilities. How well equipped is UK industry to deliver those capabilities at pace, and what are the key risks or barriers to successful and timely implementation of emerging technologies?

Sir Simon Lister: Part of the naval ships remit is to equip the ships with the combat systems, combat management systems and computer systems. The timescale of shipbuilding might be measured in four or five years; the timescales—the time constants—in the evolution of computers and control of weapons and sensors are measured in months, if not weeks. I therefore operate what is effectively a two-speed business: one that operates on a shipbuilding time constant of years and one part that operates in real time responding to the urgent operational needs.

We do that consciously, so that we are always sharpening the tip of the spear in response to the evolution of the threat, and the SDR speaks really quite clearly about that. When the two things overlap, what we specialise in is the spiral development of the platform so that the combat systems—the weapons, sensors and computers inside the ship—are being evolved at a rate easily within the ship that remains largely the same.

If I took you across to the Type 26 Glasgow today, I would walk you into flexibly configured computer spaces that evolve where the computers themselves are being upgraded. I could take you into the large mission bay, a capability that the Ministry of Defence, with great foresight, included in the ship. The mission bay—there is a version of it in the Type 31, too—is there to enable the latest technologies to be rapidly brought into the ship, rather than waiting for the next refit or upgrade opportunity, and deployed perhaps in a container or some kind of bespoke enclosure that enables the latest technology to be deployed. Rather like plug and play in our home office, the combat system enables these new capabilities to be plugged in and operated from the get-go. There is a picture that I would like to create of constant evolution, but cutting-edge, rapid spiral development too.

John Howie: To Simon's point, it is two projects added together. There is a project about building a ship, where the pace of technological change

on propulsion systems, heating and ventilation is much slower than it is on the electronic systems, particularly around combat systems.

One of the opportunities we had with Type 31 was that the MOD left the choice of combat system to us. We chose a combat management system called Tacticos from Thales, and we chose it because it is an open architecture system where the interfaces between the combat management system—the brains of the ship—and the various sensors, the radar, the guns and the missiles, are easier to manage because of the nature of how it is integrated. Tacticos is already at sea on 124 ships, so it had been tested and proven.

If you want to see the evidence of where that does not go well, there was press coverage last week about the trouble that Denmark has had—ironically, with the ships that were the predecessor for Type 31—with its own combat system, where it has struggled to get the integration to work properly. A warship is only as good as the nature of the weapons it is able to deploy; that is the nature of the beast—and, as Simon said, the other capabilities, such as mission bays. We are very confident that Thales, as our programme partner, has the responsibility to do that integration.

There is a wider question for the UK, though, which goes to the heart of the SDR, and it is that piece about sovereignty. One of the things the MOD is becoming increasingly mindful of—the Ukraine war has taught us this lesson—is that it is not only about the equipment you use; it is about your ability to have access to it in times of heightened tension. I know that the Secretary of State and the Department are focused quite heavily on what capabilities need to be genuinely sovereign, and which ones we can rely on partners for. I guess we will see some that in the defence industrial strategy, when it is published.

Q63 **Lillian Jones:** The Navy has reportedly been instructed to find efficiencies in its existing ships and systems before procuring additional ships. Do you believe there is still room for improved efficiency?

Sir Simon Lister: From our perspective, we are working in another part of our sister company in support of Type 45, reducing the amount of maintenance required on it while improving its availability—its reliability. The Type 45 has had a difficult entry into service, but I would say that is now behind it. The latest modifications have been highly successful.

Part of generating efficiency from the fleet in being is to make sure that almost every day that it can be at sea, the ship is available to go to sea. We are reducing maintenance and taking those lessons about how we approach commercial standards of availability explicitly into the Type 26, so that we are targeting very high levels of availability. When the commanding officer of the first Type 26 goes up to the bridge, she is told that the ship is available for deployment there and then, every day that it might be demanded: that is the objective. We are driving the engineering, maintenance and quality of the integration of the ship and

the parts for it to the next level of achievement. That is our objective, and from that efficiency will flow.

John Howie: We probably look at it in very similar ways. Warships are really expensive assets, and they are not any good to the country if they are tied up alongside a berth, unable to go to sea. One of the big focuses for our support team in Devonport is maximising availability and reliability. In some cases, on things like Type 23 frigates, that has involved changing out machinery components, diesel engines and so on, for ones that are inherently lower cost to operate, with a smaller carbon footprint, but also much more reliable, given newer technologies.

As a reliability and availability piece, we have spent a lot of time working with the Navy, using data analytics to start to get better at predictive analysis of ships. If you go into our warship control centre in Devonport you can see a chart there of all the current UK Type 23 frigate fleet on it, with an analysis of how available both the platform and key systems are, but also predictions going out one, two, three and four-plus months, based on the tie between that analysis and the spares support and repair chain that sits behind it. We can say, "That ship is not available, but we know the gun will be returned from overhaul in a month's time and it will go green at that point." We are working with the Navy to try to get as much value as they can out of the current assets.

Obviously, the other big cost in a warship is the crew, and on modern warships the use of technology means the crewing numbers can reduce. There is always a balance with the Navy—Simon knows this way better than I do—between the number of crew it takes to physically operate the vessel and the crew who need to be there for operational requirements, be it damage control or boarding parties, and so on. But in terms of the core crewing, Type 31 is operating with probably about half the crew that Type 23, which it replaces, did. If you used more automation, more remote compartment monitoring, that number could come down further. The question is whether the Navy would want it, for operational reasons, but the technology would allow it. When you look at large commercial vessels, they operate with very small numbers of crew, but warships are different.

Sir Simon Lister: I mentioned the global combat ship, where the Type 26 is sold to Canada and Australia. About 65% of the ship is common in all three countries. We are working with the Governments of all three countries to align and share data about the reliability of those platforms, so that we take ship reliability to the next level through analysis of the reliability data, and sharing it, much the same as the air industry has done with aircraft, which now approach extraordinary levels of reliability. We aim to do the same with that population of 30 ships across the world.

Q64 **Mr MacDonald:** I should have made a declaration of interest at the beginning: I have a share in an engineering company that is subcontracted to Babcock—not big enough, but anyway.

I have a question on procurement. The defence review called for faster contracting cycles of two years. Is that likely to happen?

John Howie: I go back to my point about the biggest transformation since Levene. Under the new national armaments director structure, the MOD is in effect bringing together the whole lifecycle of procurement, from the research labs and DSTL all the way through to the decommissioning process, but with the core DE&S and Defence Infrastructure Organisation procurement in the middle.

It is a fairly sizeable challenge, but through things like the new Defence Industrial Joint Council everyone is on the same page that, as the pace of technology improves, we cannot take so long to buy equipment. The lifecycle on things like autonomy is getting so short that we will risk the product being obsolete before we finish buying it. There is a kind of a necessity that it has to happen—it is probably for MOD to comment on how it is going to deliver that—but there is an acknowledgement that with technology lifecycles and the desire to have more small and medium enterprises, it simply cannot afford the overhead costs of long procurement cycles; it needs that rapid turnover. I think everyone is committed to doing it, but the devil is in the implementation.

Sir Simon Lister: My colleagues in BAE Systems might wonder why I am going to say this, but our commercial officer colleagues in the Ministry of Defence deserve our sympathy and support, because they are charged with accelerating procurement timescales but have to demonstrate propriety and value for money. Frequently that is through the use of competitions, which have a timescale to them. Finding a way through that need for propriety and value demonstration is crucial to achieve those reduced timescales. The SDR document highlighted routes to do that through longer-term relationships that demonstrate value on a longer timeframe and are now enabling contracts to operate, all the time allowing small and medium enterprises to enter into those enabling arrangements.

We have to talk with Government about the way we go about procurement, recognising value for money and that there is always a pressure for competition and propriety. But there are ways through, and we should approach that with candour and work out what to do. It means a mix of long-term relationships with rapid enablement of smaller work.

John Howie: Simon has prompted me to think of a conversation I had with MOD recently. There is no doubt that the MOD is increasingly aware of the value of collaboration and is moving away from a competition by default mindset. I think we will see a move away from the MOD taking long periods of time to write very detailed, prescriptive requirements, to a phase of having dialogue with industry about problems it is trying to solve. One of the things that has emerged through this closer working relationship is, as Donald Rumsfeld said, the unknown unknowns. Often someone in industry may well have a solution to a problem that you have not yet been able to articulate in the form of a solution.

Clearly, there is a challenge about industry collaborating and sharing its good ideas, when it might have to then compete. Thankfully, that is a challenge for the MOD commercial officers to wrestle with. But there is a recognition that you cannot just change the procurement process without first changing the philosophy about how you buy in the first place.

Q65 **Mr MacDonald:** You touched on sovereign security issues. Is it important to you that steel continues to be produced in Britain?

John Howie: From an industrial point of view there is no doubt that it would be great if all the steel we needed in our shipyards was made in the UK. The reality is that, even with the shipbuilding programme we have at the moment between the Clyde and Rosyth, the volume of steel required would probably keep a steel mill running for a week or two weeks. Steel mills turn out way more capacity than shipbuilding needs. The thing we sometimes wrestle with is that people assume steel is steel, but, as you know, it comes in huge numbers of different grades, shapes and profiles, and often the profile you need is so bespoke that it is just not available. The UK industry cannot manufacture small enough volumes to be viable, or some of the profiles that are needed, so we have always ended up with a mix of UK and European steel as needed. But in an ideal world it would be great if we could buy everything in the UK.

Q66 **Chair:** How important is private capital in supporting defence innovation?

John Howie: The SDR identified the importance of investment to drive innovation but started to signal a willingness to look differently at how the private sector employs capital in defence. Simon knows this from his days of being, in effect, our customer in the MOD, but that Treasury test and value for money means, in theory and in principle, the Government can always borrow money at cheaper rates than we can. Between industry and MOD, though—the investments in the shipyards are a good example of it—there are ways that we can reduce the net cost to the taxpayer. In this instance we use private sector investment to make it more cost-effective to build ships, and the taxpayer pays a lower price than they otherwise would, which offsets the investment cost and provides industry with a return.

It is very important, and it takes us all the way back to the national shipbuilding strategy piece. The private sector is absolutely willing to invest. It needs a basis on which it can invest reasonably, and the debate it has to have with its financial institutions about the likelihood of getting returns.

Sir Simon Lister: My answer is very similar. In our business, we have invested heavily in the facilities and machinery to build ships more efficiently, but in parallel, and perhaps not quite as visible, is the investment we make in novel technologies and novel applications of those technologies into capability, particularly in the field of autonomy but also in software development. Making those remarkably small, modest investments to unlock understanding about what the next generation of

defence capability might look like is a vital contribution that industry makes.

Q67 **Susan Murray:** Does that apply to the SMEs in your supply chain as well? They are in a similar situation of needing to fund their operations.

John Howie: SMEs have an additional challenge, and it has been well-trailed, which is the way some institutions have used ESG criteria to assess investments in defence. Through the old Defence Suppliers Forum and trade bodies like ADS, there were lots of reports of employees who could not get bank accounts with challenger banks, landlords that would not rent to defence companies and, crucially, SMEs that just struggled to access finance.

If you are an SME in defence, you need a number of things to be successful. We have talked about the need for shorter procurement timescales to reduce the burden of being involved in defence. You need prime contractors—often, companies like Babcock and BAE sit at the top of the food chain buying a complex system like a Type 26 frigate, and the SMEs sit underneath that—that are motivated to be nurturing of SMEs, not to take their people and technology. The third thing is that, ultimately, you need the demand to be there. The customer, in the shape of the MOD, ultimately has to be investing in those new capabilities and technologies. As you see in the SDR, they are saying that 10% of the equipment plan funding will go on novel technologies, and hopefully that alone will encourage people to get out there and innovate.

Sir Simon Lister: We are in no doubt about how daunting it can be for a new SME to get into our supplier list or get into a relationship with us in developing a new technology. We are acutely conscious of that and try to open up pathways where what were sometimes seen as burdensome demands for quality documentation, cyber-defence and so on will really open up and start work. Then there is the ability for the prime to protect the IP of the SME, which is the secret sauce of the SME's value proposition. Those are all difficulties that need to be acknowledged and worked on as we get into a relationship.

An example of where we have opened up our facilities is the Portsdown Technology Park in Portsmouth. Over the last five years we have built a building that has a secret part and then an accessible part, to enable SMEs to join us in the development of different technologies that we then put into a sandbox to test. That is a pathway that we have created sensitively to allow that SME access.

It is difficult, but in the other part of our supply chain I would point out that the number of medium enterprises supplying into the Type 26 programme is remarkably large. It has taken a while, but they have now settled into a steady supply. All those arguments we have made in the last 45 minutes or so about continuity in shipbuilding trickle down into the supply chain and into medium enterprise with exactly the same

impact, and I would really ask that the recognition of continuity extends to the benefits for small and medium enterprises too.

John Howie: One of the things that the UK discovered, principally in the submarine enterprise, where volumes were smaller, is that sometimes with small or medium enterprises, it is not that their financial viability itself is at risk, but their willingness to participate in defence is. When the volume of product that we buy from them is so low, it becomes uneconomic to keep making certain kinds of components that are only used for a specific application on something that gets bought every 10 years, and it is much easier for them to look to oil and gas or other industrial applications. The certainty is not just to give them financial assurance; it is also to ensure they stay actively engaged in the industry. It is another piece of the sovereignty argument: not only do we need access to sovereign suppliers, but we need certainty of supply, so that when we need to call upon the supply chain in times of trouble, it is there and able to respond.

Q68 **Susan Murray:** Would you say that that should or could involve some element of ensuring that the business environment is conducive to them surviving? In some instances, they have become very specialist suppliers, and they are at a size that can be flexible for the volumes that you need, but they have the specialist skills for the quality of component that you need. It is really important that we do not forget about them when we are looking at the overall economy of the country.

Sir Simon Lister: It is just that. We have suppliers in the Type 26 programme that we nurture and have a very close relationship with that are only four or five people, but they are producing something that is unique and absolutely needed for the fighting capability of the Type 26. We nurture that for the operational reason of making sure the programme runs on time, but also for the long-term benefit that that SME brings to the enterprise as a whole.

John Howie: Simon mentioned earlier that there are not only times when we compete with each other, but times when we collaborate, and how we use the supply chain is a good example of that. The more we are able to co-ordinate the way we buy from some of these smaller suppliers, the more we avoid periods of feast and famine and give them greater continuity.

There is also a role for the primes and for MOD as a customer to look at how we balance domestic demand for products that themselves become inherently exportable. One of the ways we get resilience is by having factories that are not just reliant on the UK MOD for orders, but are supplying products that have international use, including in the UK. The UK armed forces are still one of the best sales tools that companies like BAE and Babcock have. Products used by the UK armed forces become inherently much more sellable in international markets just because of the high regard they are held in.

Q69 **Dave Doogan:** I was not planning to make interventions and therefore did not alert the Committee to my entry in the register of interests, as I should have done. I have a family member who works with Babcock at Rosyth.

BAE has been subcontracting to Ferguson Marine. How successful has that been? How would you characterise the quality of the relationship and the quality of the product that BAE has got out of Ferguson Marine?

Sir Simon Lister: Successful enough, and we are keen to support that circular economy on the Clyde. If Ferguson's can economically provide us with units from its steel production facility to the necessary quality, we will continue to contract with it as we need, to support our build activity. The quality has been fine, and I would say that we have worked closely together on that. There were one or two emergent problems, as there always are in developing a supplier, but those have been overcome with candour and pace.

Q70 **Dave Doogan:** Excellent. Type 26 is a heavily integrated, complex warship—it is really a weapons system in the shape of a ship—and so that ship manufacturing element and the fit-out that happens on the Clyde rolls up into a very expensive, very effective product for the Royal Navy. In big handfuls, not accurate numbers—really roughly—how much of the supply chain in that enterprise do you think lands in Scotland, in the rest of the UK and overseas? There are big, complex components within the ship that come from other places.

Sir Simon Lister: I have not brought those specific numbers into the room—I will happily write with them, Chair—but in big handfuls, 55% of the cost of a Type 26 is out there in the supply chain, and a significant proportion of that supply chain expenditure is spent in the United Kingdom. I would say a significant proportion of that UK expenditure is in Scotland, not least because, inevitably, all of our category D suppliers, which provide the paint, access, facilities, wiring and all that kind of activity, are local. Nearly all the valves in the ship come from a supplier in Aberdeen, and now that has taken off in supplying to both Australia and Canada, so those benefits are real. That is a real crossover in the Scottish economy between oil and gas on the east coast and the shipbuilding on the west coast, with real benefits for the global spread of the Type 26.

Q71 **Dave Doogan:** Excellent. John, Type 31 is also a frigate. It is a very different frigate for general purpose. Is it accurate to say that it is therefore attractive to a wider range of navies around the world that would not be in a position to either fund or commission a ship like the 26? Are they likely to want those ships to be built in their home market, or are they likely to want their ships to be built by Babcock back in Rosyth, and what does that mean for the supply chain?

John Howie: You are absolutely right. Type 31 is inherently designed to be a simpler, more cost-effective platform. It is horses for courses, isn't it? When you are doing anti-piracy work, Type 26 is a complex weapons

system, and you need something with lots of space that is simpler, manoeuvrable, and so on. Type 31 fills a different role, and its adaptability and flexibility make it good for export. Before we have even finished the first ship, we have sold design licences to Poland. The Miecznik—Swordfish—programme is being built there, and we helped design the shipyard facilities that are building it. We have the Merah Putih frigates in Indonesia, and we have current campaigns going on in at least four other countries, some of which will be built in Rosyth and some of which will be built domestically.

Lots of countries see shipbuilding as part of their industrial development; it is nation-building, which is attractive for some nations. If I look at the economics of our business in Scotland, we employ 5,500 people in Scotland, but we support 9,500 jobs in total, and we spend £150 million in the supply chain. When countries like Indonesia look at Type 31, they see a ship that has been designed originally by the Scandinavians to be very straightforward to build, but they also see one where there are opportunities to get that trickle-down economic benefit of not just employing direct shipbuilders in the shipyards, but bringing local supply chains in and getting that wider economic benefit. As Babcock, we know that every £1 we spend in the UK generates £3 of economic benefit, but that is going to be true wherever you choose to do that work. Often, for developing countries, shipbuilding is a good way for them to build industrial capability.

Q72 **Dave Doogan:** So part of your USP, if we were keen—hopefully we are—to build these ships in Rosyth and export them from there, would be that you are the compelling value for money option. The investment in the economy is understood—you put £1 in and get £3 back—but if you need a ship, you need a ship, and if you do not have the ability to manufacture warships, you probably could do it yourself in 10 years, but you could have it sitting alongside in four or five if we build it for you. Is that feeding into the export strategy?

John Howie: The headline narrative of five ships in 10 years is a good salesperson's tool when you are talking to people who want certainty. It is not just about Type 31; we are working heavily with Saab at the moment on the new Swedish naval corvette programme. Saab selected Babcock because it saw the benefits of that investment in automation and robotics as well as the design thread from the design all the way through to acceptance, which gives people certainty. They know they are going to get value for money, and they should get greater certainty of delivery. It helps us not just in trying to market Type 31, but just generally in marketing UK shipbuilding as a good, viable source.

I have talked about this in previous Committee sessions, but one of the biggest challenges the UK faces is that some of our international competitors in Europe have nationalised the shipbuilders, but they put forward really quite compelling senior Government-level offers: "We'll give you two spare ships up front" or "We'll give you extra landing rights

at some international airport." It is one of the things the UK has recognised in the SDR. With the move of the UK Defence and Security Exports team into MOD, there is a desire to have a more joined-up approach between industry and Government, and between Government Departments, on how we make those compelling offers. The UK-Sweden relationship is politically really important. It is being able to leverage some things as well as the industrial offerings that companies like BAE and Babcock might make.

Q73 **Douglas McAllister:** Sir Simon, Ferguson Marine is owned by the Scottish Government at a civilian shipyard, but you are now working with it and subcontracting it in relation to the Type 26 programme. Was the Scottish Government aware of that and involved in your contract award to Ferguson Marine?

Sir Simon Lister: The Scottish Government is not who we deal with; we work with Ferguson Marine. We are acutely aware that Ferguson Marine is owned by the Scottish Government, but our approach is a commercial one, and if Ferguson Marine was not offering value for money, it would not be getting the work.

Q74 **Douglas McAllister:** I only raise that because you will also be aware that it was recently highlighted that the Scottish Government have a policy preventing public funds from being used to fund munitions in any way, which meant that apparently they blocked the £2.5 million grant that was to go to the specialist welding centre on the Clyde in Glasgow where the Malin Group, which you work with, and Rolls-Royce were involved. Did the Scottish Government not try to raise that this potentially was in breach of their policy? They did not see that as incoherent in any way.

Sir Simon Lister: I have not been involved in that at all. We have simply pursued a commercial relationship with a neighbouring shipyard, and Ferguson's has been really quite straightforward with us—"Here's our quote for the work that you've asked for"—and we are about to go on contract with it.

Q75 **Douglas McAllister:** We can presume, therefore, that the Scottish Government are quite happy with that arrangement to allow Ferguson Marine to work with you and have that Royal Navy work.

Sir Simon Lister: No one has expressed discomfort to me about that. I will leave that political situation for others to work on. As far as I am concerned, I am pursuing a commercial relationship with a neighbouring yard, and I will let Ferguson's deal with the implications of that.

Q76 **Douglas McAllister:** Do you anticipate collaborating with other regional suppliers to help you strengthen your resilience?

Sir Simon Lister: Yes, and we do. We seek to foster good, long-lasting relationships so that when, inevitably in a programme like this, we hit

bumps in the road, either in the supply chain or in our own work, that flexibility can be reached and can work for the benefit of all.

Q77 **Douglas McAllister:** Do you anticipate in the future working with that specialist welding centre in Glasgow that looks to support the Scottish shipbuilding industry on the Clyde?

Sir Simon Lister: Advanced manufacturing is a key part of our future. I mentioned the panel line that we have invested in. We have taken advice from the advanced manufacturing institute in Renfrew to guide us as to what we should be thinking about as we have brought in that new technology, which has been very helpful. We have our own welding expertise in the company that we reach to first, and whether another institute on the Clyde could assist, I am not clear. My honest answer to that question is I do not know, but we will reach inside and then to the advanced manufacturing institute next.

Q78 **Elaine Stewart:** How effectively does the UK Government promote Scottish shipbuilding, and how could the UK and Scottish Governments work together to promote it internationally?

Sir Simon Lister: I have not mentioned it so far, but we have benefited hugely from the UK Government's support for our campaign to supply Norway with Type 26 frigates, and we look forward to the outcome of that competition. The support that we have received from the UK Government over the last few years has been absolutely first-class and has put us in a competitive position. That has been supported by the Scottish Government too. We have welcomed the dialogue between the Deputy First Minister and the Secretary of State for Scotland. I see that happening on a regular basis and we feel that alignment strongly.

We feel well supported, and we feel that that support is pretty well co-ordinated, frankly. That goes through to skills. The national shipbuilding skills agenda calls for co-ordination between the nations, and that is being called out in the next wave of developing skills in Scotland. To me, it feels well co-ordinated today, and I would offer no complaint at all in terms of the environment being really supportive of shipbuilding on the Clyde.

Q79 **Chair:** Sir Simon, we have mentioned the Type 26s and there is obviously the competition ongoing at the moment to supply Norway. Could you give us an idea of what stage those discussions are at?

Sir Simon Lister: The Norwegian procurement process is in full swing, so I am really quite limited in what I can say. The Norwegians have looked very carefully at our capability, including visiting the yard and making a technical evaluation of both the ship and our capability to build the ship. I think the Norwegians have said that they are expecting to decide this year, and we await, with the Government, any further inquiries from the Norwegians and look forward to that announcement being made. We have no anticipation that it will come in our direction, but we have done everything possible to make the Norwegians as aware

as they can be of the capability and value for money that our proposal suggests. We of course believe very strongly that the Type 26 is a very good fit for the Norwegian requirement, but that will be for the Norwegians to decide, of course.

Q80 **Chair:** Of course. If you are successful and win that contract as a company, would it in any way delay the UK's programme for buying frigates from you?

Sir Simon Lister: I think the UK Government are contemplating an integrated programme of production of Type 26s, with some going to Norway and some going to the UK for the Royal Navy. As a shipbuilder, we see that as a need to accelerate the programme and accelerate the production rate, and we are already exploring how we can do that so that the ships are produced and delivered as quickly as they physically can be.

Q81 **Chair:** Thank you. Mr Howie, I understand that when Babcock came before one of our predecessor Committees in 2022, there was a conversation about the possible export of your own frigate. You have touched on that a little, but could you perhaps say a little more about the success of that programme?

John Howie: I mentioned earlier that so far, we have sold design licences to two nations that want to build it themselves. Although that sounds like a singular transaction, I was in Warsaw last week with our partner, PGZ. You do not just buy a design licence and go off and build a ship. We are providing lots of logistical support, design and engineering services. Every nation wants its own unique weapons. The Polish ships have structural changes because they need to operate in and around ice a bit more regularly, so you start to see an Arctic version evolving. That is good for us because it sustains that design capability, as well as trying to sustain a shipyard.

Beyond that, I mentioned the work we are doing with Saab in Sweden for a different platform. The concept is that once the platform is designed, it will be jointly marketed by the UK and Sweden around the world, giving us another product to add to the portfolio. As far as Arrowhead is concerned, we are actively, with the UK Government's support, working in New Zealand, Denmark, Chile and a couple of other countries that are probably less mature. New Zealand's ships will probably be built in the UK because it does not have an indigenous shipyard. Places like Chile would want to build at the very least blocks and then the full ships. Denmark, again, would be a bit of a mixed economy. I think we will also see some increased demand in places like Indonesia, where we have already been successful.

By the time the Type 31 contract was awarded, the UK Government had something like 34 countries express interest in the programme, partly because of the concept of a ship that could be acquired and built quickly, but partly also because of the sticker price that was advertised. At the time, it was an average production price of £250 million, excluding some

Government-furnished equipment. Clearly, the advent of covid and some of the inflationary changes have moved those numbers for the future, but it is still a very cost-effective platform and, as Dave said, that will make it attractive for some countries.

Q82 **Kirsteen Sullivan:** In recent evidence to the Business and Trade Committee, it was indicated that skills shortages are no longer a significant challenge for BAE and Babcock, which was a shift from the evidence to the predecessor Committee in 2022. However, you have said this morning that skills remain the biggest challenge. Can you give me a bit more detail on where there have perhaps been some improvements and where there remain stubborn areas that have to be addressed?

Sir Simon Lister: As I said earlier, skills are still a challenge for us that we must focus on relentlessly. We are no different from any other part of the Scottish economy seeking those basic skills of welding, electrical, pipe and mechanical fitters. Whatever sector they are going to be applied to—the green economy, shipbuilding or construction—skilled workers are going to be needed, and they are in short supply. We have had vacancies for most of those skills for a long time. The number of vacancies is reducing over time, and we have been topping up our workforce through access to contingent labour from the worldwide market for those skills. Of course, it would be much better for us and the Scottish economy for those skills to be indigenous.

We are doing our bit—every bit we can—to train, develop, retain and attract new entrants to our skills development system. We train around 200 apprentices a year in Scotland alone. We are having to reduce that number slightly this year because our capacity to train that many apprentices is limited by the number of skilled folk who can offer the journeyperson's time to them, but the aperture is as open as it possibly can be.

While we have seen some alleviation, both through our own efforts and through improved access to overseas contingent workforce, we still have to focus hard on that as the principal risk to the future.

John Howie: If my memory serves me correctly, the point I was making at the Business and Trade Committee hearing was really about the short-term impact. Like BAE, we benefited from MOD and the Home Office helping us to access a global supply of contingent labour, but it was very much done on the basis that there is a difference between the short-term palliative measures and the long-term solution. Bringing in contingent labour from around the world is a way of solving a short-term skills gap, but it is not cost-effective and is certainly not a long-term solution. It was done deliberately to buy us time to improve things like early careers programmes, apprentices, graduates and production support operatives, and we have doubled the scale of our early career schemes in recent years. As Simon said, one of the challenges is bringing enough people in and making sure we have enough skilled people to teach them.

One of the other things that drives you to automation and robotics, ironically, is that, looking at our staff attrition rates, the demographic that is most likely to leave our business—this will come as no surprise—is people in their late 50s and into their mid-60s, generally because they are retiring. Sometimes they retire because the jobs they are doing can be physically demanding, but if you can take that physical demand out and replace it with the work that a robot does and give them the skills to manage the robot or the automated panel line rather than crawling about on their hands and knees, then some are willing to stay in the workforce longer, and that gives you more opportunity to train the next generation of people who come in behind them.

The long-term challenge remains, and we have to work really hard to find the core skills at all, and then to persuade them that shipbuilding is where they want to commit their future, when there are other choices out there. But in the short term, we have been able to mitigate some of it with Government help and with a bit of innovation on where we find people.

Q83 **Kirsteen Sullivan:** That point about retirement and perhaps changing the roles to support people to work longer leads nicely into my next question. How prepared is your organisation to manage the anticipated wave of retirements over the next five to 10 years?

John Howie: We have lived with some of it already. One of the legacies of the shipbuilding programme in the UK—and I guess this is actually a wider industrial point—was that, when looking at the demographics, we discovered that we had two large groups of workforce. We had a lot of people aged 50 plus, and we had a lot of people aged below 30, because we had stimulated demand through increased apprentice and graduate programmes. Where we had the real problem was in the middle ground: the people who in theory should have been recruited 10 years earlier but the work was not there to justify their employment. They are the people who you rely on to be the next line manager, supervisor or senior designer.

Part of the challenge we have lived with for the last decade is trying to avoid that skills dearth in that middle ground, and some of that involved getting some of the older workers to stay on longer just to take the cliff edge away. I think we have successfully avoided the cliff edge, but there is also the recognition that those employees are not going to work forever and we need to make sure that we get the benefit of their experience before they decide to go away. To say it is a daily struggle is overplaying it, but it is a daily focus for the skills team.

Sir Simon Lister: It is similar for us. We focus hard on health and wellbeing for our senior folk and continue to attract people in their 60s to return to work in the yard to do manual tasks, and really respect that desire to come back in and contribute. Our age demographic has levelled, for the same reason that John mentioned: that twin peaks effect that was present six or seven years ago has broadly levelled out, so we do not

have a cliff edge in the way that we once did. We use a range of techniques similar to the ones John has described, but with an academy on site, it is also a real pleasure to introduce the academy as an alternative place for folk to pass on their skills in their last two or three years. We have an increasing number of volunteers coming forward to say, "I'll come out of retirement. I'd actually like to pass on the wisdom that I gained over 40 years in this trade hall." It is a real pleasure to see that happening.

Q84 **Kirsteen Sullivan:** You touched on the fact that you had to obtain workers from overseas to plug skills gaps. To what extent is current immigration policy impacting your ability to do that?

John Howie: It has undeniably changed the markets we access. Shipbuilding in the UK, as I said, is a very cyclical industry. Without lots of demand, it is very difficult to say that we need 150 welders all the time. Sometimes you need 300; sometimes you need 100. The industry has always relied on being able to bring in contingent workers to help with periods of peak demand. Traditionally, they would have come from places like Poland and Romania, where there were strong shipbuilding industries, and they would be in the UK for maybe five or six months and then return home. The change in the immigration laws meant that we have been inclined to bring them from other countries where English might be a first language, and where they also have strong shipbuilding industries, but they also tend to be more expensive because they are a bit further away. It has changed the markets we access. As I said, in an ideal world you would not use it at all, but it has been a necessary part of shipbuilding for a very long time, and I do not think we will ever eradicate the need for the use of some sort of fixed-term workers just to manage the economics.

Sir Simon Lister: Our contingent workforce has pivoted, as John said, from eastern European countries to the Philippines and South Africa because of the language requirement—the need to be able to pass a language test to gain the visa. That pivot has increased the cost, inevitably, because they are coming from further afield, and it has increased our need to look after the welfare of folk who are living some distance from their families and family support, but it works. We have pivoted to that market, but we are slowly reducing our demand for contingent workers as our own core skills are built.

Q85 **Kirsteen Sullivan:** Does it also give a bit more impetus to the drive to upskill, retrain and reskill our local workforce and build those pathways?

Sir Simon Lister: Yes, it does, and that is not just an altruistic ambition; it is a pure economic argument. Employing someone 10,000 miles from their home is definitely more expensive than employing someone from a mile away.

Q86 **Dave Doogan:** I wonder whether you think shipbuilding, even complex warship building, has a reputational issue. Some parents play a big role

in directing their kids towards a career. You have both mentioned a couple of times today the cyclical feast and famine; people getting made redundant from shipyards is a shadow that looms long. Do you think there is a reputational issue that parents might seek to steer their kids away from rather than embracing a fantastic lifelong career in engineering? If you do think that, how do we fix it?

Sir Simon Lister: Definitely. We see parents, uncles and aunties as gatekeepers for decision making in young people about which career to pursue, and our STEM outreach programme is as much orientated to the influencers of young people as it is to the young people themselves. We have to dispel the stereotypical views of shipbuilding—lighting your cigarette on the end of your welding rod while you are taking a 10-minute break—because it is a much more civilised and regulated space, much more akin to modern manufacturing and any other construction or manufacturing activity, than its reputation suggests. We do that by opening up the yard as far as we can, bringing in the cameras and bringing in folk to experience what modern shipbuilding is about. Our main track is to link with others in the region, and on the Clyde in particular, through the offices of the national shipbuilding strategy. The Shipbuilding Skills Delivery Group is focusing on reputation and outreach as key factors in improving the reputation, accessibility and recruitment activity in shipbuilding. You are absolutely spot on.

John Howie: In one sense, companies like BAE Systems and Babcock have the advantage that because they are generally large companies, they find it easier to attract school leavers into apprentice programmes. On average at Rosyth, we bring in 100 apprentices each year. There are over 1,000 applicants because our apprentice scheme, like BAE's, has a fabulous reputation. The retention levels are high; three quarters of the people who start the programme will finish it and choose to stay and go on to have careers. It is fine for us, but it is probably harder for some smaller businesses.

There is no doubt that the industry has a perception problem. I have attended things like graduate fairs where we were demonstrating complex 3D computer-aided designs for warships with augmented reality goggles and there was nobody on the stand, but for a retailer they were queued round the block, because people think, "Ah, shipbuilding is cold and greasy and oily." Actually, most shipyards look more like electronics factories these days. There is a legacy reputation, as Simon said, of what shipbuilding entails.

One of the other things we need to grapple with—I say this as a parent with experience of children in senior school—is the role that schools' careers advisers play in helping people to understand that there are careers for girls beyond beauty therapy and primary school teaching, and for boys it is not just about certain career paths. There is some work to be done there, and I agree that the work that the shipbuilding skills taskforce did under the auspices of the Shipbuilding Enterprise for Growth

came up with some really robust recommendations on how we improve the future skills for shipbuilding given some of the industrial challenges that exist.

Sir Simon Lister: In the academy about three months ago, we held an outreach event for about 200 girls and young women, and it really opened their eyes when our manufacturing director, commercial director and finance director stood up in front of them—all senior women on the board in the organisation. I think it did so much. My manufacturing director was there in her overalls—she wears them all the time—and eyes were on stalks in the room because suddenly they could see themselves on that stage. We just have to do more of that.

John Howie: Across the manufacturing sector, on average only 24% of employees are women. If we are only going to recruit from one part of the national demographic, we are always going to struggle.

Q87 **Mr MacDonald:** There has been a lot of coverage of the shortage of engineers, technical skills and so on in Scotland. Do you have a view on whether we are teaching the right subjects from primary school up to secondary school to enable us to take advantage of this changed economy we are living in now?

Sir Simon Lister: I am on the national strategy for economic transformation delivery board for the Scottish Government, and I focus on skills in that environment. I am on the record there as saying that we should improve our focus on technical education. My personal education involved a lot of time in workshops. At the age of 14, I was operating a wood lathe and a metal lathe. At the age of 16, I was casting in a foundry at school. It is a matter of continuing regret—thank you for the opportunity to say this. The absence of workshops in schools needs to be addressed, because young folk are unfamiliar with the joy of making things and their ability to make things. When we bring people into the company and reveal to them that after six weeks of good training, they are able to make really good things that contribute significantly to the process of building a ship and be really proud of them, the pride in those individuals is fantastic. It is one of the things that keeps me working in this area.

I regret that that technical side of education has diminished over time, and I do hope it is recovered. They are skills that are needed for every sector, whether it is running hospitals and maintaining the systems in hospitals, or the green economy, the basic skills of hand are not taught at school and are not yet valued properly. There is a tremendous pride in being a really accomplished welder, or any other skill of that type, and I would love to see that rekindled over time.

John Howie: I echo that. Part of our challenge is that there are lots of young people today who were encouraged through the system to go and do obscure university degrees when doing a modern apprenticeship to learn some of those skills would have been economically better for them,

because often they finish those courses and find work really difficult because it is such a bespoke course. Even for the people who go and study engineering and manufacturing skills, people often talk about the strength of the manufacturing sector in Germany—the automotive and aerospace sectors—but if you are an engineer in Germany, you are treated with the same respect as a doctor or a surgeon would be. In the UK, we do not view engineering in that way. We still see it as a bit manual and a bit lower grade.

Today, when people finish engineering degrees, they are far more likely to find a job in the financial services sector than they are in engineering. Financial services love engineers because they are numerate and have good thought processes. Engineering companies like Babcock and BAE are constantly struggling to pay the wages to compete with some of these other, faster-moving sectors to attract the engineers that we do get, and often just keep them in the country. We do a lot of work with UK engineering universities such as Strathclyde, Heriot-Watt, Plymouth, Exeter and others. A lot of their graduates go overseas because they can get higher salaries. There is more we have to do. I agree with Simon that it has to start at grassroots level with people learning to love engineering so that it gets into their blood, which it invariably does.

Q88 **Lillian Jones:** Retraining and lifelong learning of the existing workforce has been noted as a challenge in the sector. What is your assessment of the effectiveness of the current skills provision in supporting continuous development?

Sir Simon Lister: We see it as a vital component. We tend to talk more about new entrants and early careers, but the access routes that we are creating for folk who have either been bypassed by the education system and not been successful early on, or have concentrated on bringing up a family and then want to come back in, is where we see significant growth. We are in dialogue with the Scottish Prison Service about how we can facilitate careers for those completing a period of imprisonment. We are trying to open up all possible routes for folk who otherwise would not have realised they could get inside the dockyard wall. We are in the foothills of making that successful, but we have been running at that for two years. In the last intake of 200, around 25 to 30 came in through a novel route, and we intend to continue with that direction of travel.

John Howie: I go back to the point I made about the route that took us into shipbuilding in the first place. It meant that we very deliberately took the view that we should not try to mimic what was already there; instead, we needed to try to be different. That drives a demand for good-quality lifelong learning programmes. If you want to automate currently manual roles, particularly where you are starting to involve robotics and complex machining, you are constantly teaching the workforce new skills. Sometimes there is nothing more heartening than seeing a shop floor employee in their early 60s who is suddenly now driving a laptop that has a £2 million machine attached to it. Some of them get really, really good

at it. They bring all their industrial experience to the automation process. If you do not invest in the lifelong learning piece, then you cannot get that technology to work for you.

I mentioned the production support operative programme. As Simon said, we know how many people in the economy are economically inactive. A lot of the people we have attracted were economically inactive not by choice but just by circumstances. We brought in lots of single mums who had children early in life, found themselves out of work, the children had gone to school or got a bit older, and they needed a path back into the workforce but lacked the skills and experience to do it. Programmes like that have given them a pathway into the workforce.

As an industry as a whole, we have more to do. As we said, there is a challenge not just in attracting people into the sector but in retaining them, because once they have a good company name on their CV and lots of skills, they are attractive to others. We have to give them reasons to stay, and often that is about not asking them to do the same thing day after day; variety is the spice of life.

Q89 **Lillian Jones:** How can the Scottish and UK Governments collaborate effectively to ensure that skills provision is responsive to the dynamic needs of this specific workforce?

John Howie: That is a good question. Clearly, it is not for us to make any sort of political points, but industry craves certainty and coherence. We have talked about the certainty and the way Governments invest in skills provision. For us, the coherence thing is about trying to avoid having different systems that affect businesses that do not view any boundaries. We want the ability to train an apprentice in Scotland using the same basic principles as an apprentice in Devonport and to move them around because their qualifications and the way they were trained are the same and, from a business administration point of view, the way those schemes are funded and governed is the same. If there were a plea from us, it would be that wherever there are opportunities, alignment is important. Please do not make things different just for the sake of making them different. It really does not help businesses that work not just on a domestic, cross-UK basis, but internationally.

Sir Simon Lister: I think alignment, and I think investment in skills and recognising that skills is one of the engines of the economy. I see a welcome start to refocus on skills and the need to invest in colleges so that the skills being taught in colleges are cutting-edge: if a welding process is being taught, then it is a computer-controlled welding process that is being taught, or the college has sufficient investment in IT to enable it to be introduced. The co-ordination between the Scottish Government and the UK Government in terms of alignment of the qualifications extends to foresighting what skills will be needed in the future and then talking up what those skills are and how the college sector should adapt and be invested in to deliver that. I see plenty of

opportunity for that, and I am hearing more alignment than for some time, so I am more optimistic than I have been for some time.

Q90 **Lillian Jones:** I certainly agree with your point about investing in colleges a lot more. I come from Ayrshire, which has a rich engineering heritage over many generations, and yet our young people struggle to access colleges because the engineering courses are not available due to cuts in funding, so I really agree with that point, Sir Simon.

In August 2024, BAE opened a £12 million training facility in the Applied Shipbuilding Academy in Scotstoun, which is fantastic, but what impact have these academies had on improving the skills provision of your existing workforce? I recognise that you opened two other training academies prior to that one.

Sir Simon Lister: The impact on the yard has been profound. There is the obvious impact of trainees coming into the business. The skill of hand of second-year apprentices has been taken to the next level. Those skills may have taken another 18 months to develop. They are immediately much more useful when they come to be deployed to work on the ships, even in their second year. They can be trusted, and they find much more work satisfaction from the tasks that they are given, even while they are undergoing training. The impact has been even more profound than that in terms of attitudes and behaviours in the yard. We are moving into being an organisation that respects learning. Without an academy, it is difficult to argue that you are a progressive learning organisation, but now we are.

Alongside the skill of hand that we are teaching, we have a collection of over 20 case studies. I mentioned that the academy is there to teach from boardroom to shop floor. Those case studies are the shipbuilding equivalent of a business school, teaching shipbuilding skills that are not to do with hands but are to do with the way we organise and lead and work with our customers to deliver successfully. That a huge value-adding component to the shipyard proposition.

Q91 **Lillian Jones:** Mr Howie, what measures have you taken to ensure your workforce is keeping up with evolving technologies?

John Howie: We took a different path. BAE have opened that fabulous training centre. We are funded in a different way through our contracts, so we have gone down the path of collaborating with local colleges. They form a fundamental part of our training programmes and often act as the filtering mechanism for our intake. They can sort the really good candidates from the less hard-working—if that is the right way to put it—or the less capable. A fundamental part of that now is the technology enablement. The days of just teaching people how to use a welding torch, spanner or hammer are behind us. On one hand we rely on the colleges and then we rely on the way we deploy the technology in the business.

One thing that we have done in the past is take people who were workers on the factory floor and retrain them as computer-aided design

operators. It gives them an understanding of the design process, but it also means that when we design ships, we design them with the skill of the people who have to build them in how to put them together. The ability to swap people around in the business and use the partnerships with colleges to do the more general technological awareness training really works for us. Those partnerships are vital for us, but I think, like BAE, we will see demand for some more bespoke academies. There are things in shipbuilding that are relatively unique, and some of the challenges that come with that drive quite bespoke training capabilities.

Q92 **Mr MacDonald:** Has the shipbuilding skills strategy been effective in addressing workforce needs?

Sir Simon Lister: It has been effective in setting the ambition and cohering industry and Government around what needs to be done. It is early days for the evidence to have been produced that it has been successful, but we need to brigade behind Paul Sheerin's leadership and make sure that those five objectives of the skills strategy are progressed. We have spoken about the outreach and reputation elements of that, and the alignment nationally between the UK and Scotland about the skills definition and what the requirements are. All of those are essential.

If I speak for the Clyde maritime cluster, one of our first projects is to invest in skills, echoing the national strategy locally and regionally with Glasgow. In the next year, we will cohere our outreach programme, do more to project a positive image of shipbuilding to our target recruitment audience, and do that together so that we are not going to the same school twice; we are taking the region, working closely with Glasgow and asking, "How can we interact most productively with your careers advisers and your schools?" It is early days, but I hope you hear in my answer that we are following the strategy and deploying it regionally to see if it will make an impact.

John Howie: It is too early to tell. I was re-looking at the skills ambitions from the shipbuilding skills taskforce this morning—in a sad sort of way—and it reminded me that against each of the key findings they discovered, the recommendations they posed placed actions on us as employers, but also on the education system and on wider Government. The challenge is that the real deliverable outcomes only come when those three parts are brought into coherence. When I look at Rod Paterson and his team at the National Shipbuilding Office, they have that skills grouping sat underneath the Shipbuilding Enterprise for Growth. That is where the rubber really has to hit the road, because those three groups of people are represented around that table. It is vital for us all that it succeeds, but it is too early to tell whether the progress that is being made will take us to the right place.

Q93 **Mr MacDonald:** Do you think the Scottish Education Minister and the educational establishment understand there is a need to change our education system?

John Howie: I am probably not in a position to comment. I have not had that discussion with them, so it would be wrong to speculate.

Sir Simon Lister: Same answer, but I do detect lines of inquiry to make sure that alignment is achieved over time, definitely regionally. I sense that the need for foresighting is recognised in the Scottish Government, but I have not yet seen the machinery developed to implement it. I am really talking about how well and which elements of the recommendations in the Withers report will be taken forward, and I have seen welcome forward movement in implementing elements of Withers in the last six months.

John Howie: Probably the main place we see the rubber on the road is through Scottish Enterprise as the regional development agency, and they certainly recognise it. I guess they are a sort of proxy for the Scottish Government, to be fair.

Q94 **Maureen Burke:** Colleagues have all touched on the skill gaps. The strategy was published in 2023, yet the skills delivery group has not convened. Can you tell me why and what the delay is? Once it is up and running, do you believe the group will be sufficiently agile to respond to the sector's evolving workforce needs?

John Howie: I guess Paul Sheerin, rather than me, is the right person to answer those questions. The honest answer is that I do not know. If I go back to the recommendations, I guess the combination of the sheer scale of what is required and the need to bring coherence between three sectors made finding the right people with the right skills and the time to contribute a challenge, and that has probably taken some time, but other than that I genuinely could not comment.

Sir Simon Lister: From our perspective, we will do all we can to make a success of it. The skills taskforce under the National Shipbuilding Office was well led by Paul Little, the principal at Glasgow City, and came up with the right conclusions. It is now for all of us to cohere and put energy into that. I think we have the right membership, we have the right leadership, in Paul Sheerin, and, as I say, locally and regionally in Glasgow, we are following that thread. It is early days. I am loath to criticise it because the ambition is strong and regionally we are following it. When you next ask us to give evidence, perhaps I will be able to give a more comprehensive answer. I realise I am caveating now, but the foundations have been laid; it is up to us to implement them.

John Howie: Paul Sheerin generally gets things done, so I would be hopeful.

Sir Simon Lister: He does, yes.

Maureen Burke: One of the colleges in my constituency has been taking children in and showing them the engineering side of things. Primary 6 and 7 were taken up, and they were all very encouraged and excited by

it. I hope we get many more experiences like that in the future for those children coming through.

Q95 **Chair:** The Prime Minister has said that the strategic defence review will back the Scottish shipbuilding industry "for generations to come". Are there any additional actions that need to be taken to make that a reality, other than the things we have already touched on this morning?

Sir Simon Lister: You have asked us very sharp questions about the benefits of continuity and early engagement and recognising that that continuity benefit flows not only into Scottish shipbuilding but into the supply chain that supports it and the skills system that feeds it. I would highlight that as the critical success factor, to use that jargon, for the Prime Minister's statement to be made real. Continuity and visibility enable commitment at all levels and in all components of the shipbuilding community.

John Howie: I would give largely the same answer. I made the point earlier that as the programmes that our respective companies are working on reach their peak run rate, that is the point where they are delivering levels of productivity and output that maximise value for money. That is the time when Government gets the best bang for buck by committing to the programme that comes after the current programme, which allows the next generation of design engineers, the tools to be bought, and further investments in infrastructure to make it even more productive and cost-effective. The biggest single thing Government can do is give continuity and certainty. It is not always about the need to place the contract; it is that knowledge that the contract will come in due course versus maybe having to compete with eight other international shipbuilders and what that could mean. Certainty is the biggest thing.

Sir Simon Lister: We do not approach that with any sense of entitlement.

John Howie: No.

Sir Simon Lister: We have to earn our position in that regard, but we are determined to do so.

John Howie: We have to demonstrate that there is no need to go outside the UK because we have the best value for money, we are the best technologically enabled and we have the best skill story. I think both companies recognise that we have to constantly sing for our supper, and that is only right, because we are spending taxpayers' money.

Chair: Sir Simon and Mr Howie, thank you very much. It has been a very interesting session. We are very grateful to you for joining us, and we will no doubt be in touch at some point in the future.