



International Relations and Defence Committee

Corrected oral evidence: Defence concepts and capabilities: from aspiration to reality

Wednesday 25 May 2022

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Members present: Baroness Anelay of St Johns (The Chair); Lord Alton of Liverpool; Lord Anderson of Swansea; Baroness Blackstone; Lord Boateng; Lord Campbell of Pittenweem; Baroness Fall; Baroness Rawlings; Lord Stirrup; Baroness Sugg; Lord Teverson; Lord Wood of Anfield.

Evidence Session No. 8

Heard in Public

Questions 57 - 62

Witnesses

I: Dr Sidharth Kaushal, Research Fellow, Sea Power, RUSI; Nick Childs, Senior Fellow for Naval Forces and Maritime Security, International Institute for Strategic Studies.

Examination of witnesses

Dr Sidharth Kaushal and Nick Childs.

Q57 **The Chair:** Good morning, and welcome to this meeting of the International Relations and Defence Select Committee. It is my pleasure to welcome as our witnesses today Dr Sidharth Kaushal and Nick Childs. Thank you for joining us today as we continue to take evidence for our inquiry, "Defence concepts and capabilities: from aspiration to reality".

I always remind witnesses and my members at this stage that the meeting is broadcast, transcribed and on the record. I also remind members to declare any relevant interests they may have before they ask their questions. I normally start, as I will today, with a general question, but my colleagues will then go into more detail. When they ask their individual questions I anticipate that they will wish to follow that up with a supplementary.

If we have time at the end of our hour-long session, I will revert to my colleagues to see whether there are any further supplementaries, always giving preference to those who have not yet had a chance to put a question to you at this stage.

The first question is a rather wide one with regard to the Integrated Review and the Defence Command Paper. That gave the Royal Navy a leading role in the UK's security posture. Do you believe that the objectives set out in both those documents are achievable? Are the Royal Navy's current capabilities, including its fleet, weapons and enablers, sufficient to meet those ambitions?

Dr Sidharth Kaushal: In terms of meeting the goals set out in the Integrated Review, which I interpreted as being a Europe-first approach, albeit one with a more presence-focused ambition in the Indo-Pacific, you could argue that the Royal Navy is well positioned to meet those objectives as they currently stand. It provides something fairly distinctive to Europe and European defence in certain key categories of defence, including a continuous carrier strike capability, a fairly well-developed nuclear submarine fleet that performs operations in areas such as the High North that not all European partners operate in, and fairly niche capabilities.

To the extent that the Indo-Pacific tilt remains a fairly modest geopolitical objective in terms of its ambition, it is conceivable that the Royal Navy can resource the maritime component of that tilt, although some outstanding questions remain regarding the structure, enablers and, indeed, capabilities of the Littoral Response Group (South). That being said, should the Indo-Pacific grow in salience to UK defence policy over the long term—if the tilt should become more of a pivot, in other words, because the UK finds itself embedded in the region more and more in economic terms—what is currently a fairly well-apportioned capability might be spread a lot more thinly.

As to whether the Royal Navy's current capabilities are suited to meeting

the ambitions it sets, the capabilities needed to meet those ambitions are certainly in development, but in certain key areas right now—for example, its surface-to-surface strike capability—the Royal Navy is still probably short of where its aspirations would be. Of course, that is built into the assumptions of the review and the Navy: that its capabilities begin to meet its ambition towards the end of this decade.

Nick Childs: I am broadly in agreement with Dr Kaushal’s overall exposition of the issues. Particularly as far as the Integrated Review is concerned, the broad perspective and the primary strategic focus remain NATO and the Euro-Atlantic area, but there is this aspiration to engage more, be present more and be more committed in the Indo-Pacific. In broad terms the Royal Navy can cover those capabilities to a significant degree with the make-up of fleet and capabilities that it has.

There are a number of pressure points that raise questions going forward. We are talking about a strategic context in which, particularly in the maritime environment, we have a return of state-on-state competition that creates a much more contested space, and a space on which that state-on-state competition is more likely to be contested. We are also talking about the issues around warfighting versus persistent presence, and about this geographical spread of ambitions. There are questions about whether this will add up in the long term. In a sense, what we have seen up to now is a case of “so far, so good”, in terms of the continuing commitments to NATO, plus the beginnings of the development of the Indo-Pacific tilt. The core capabilities that the UK has, not least the Carrier Strike Group, bring a significant level of both added value in NATO and potentially the Indo-Pacific, and a degree of flexibility in how to use those.

There are areas where, even now, capabilities are spread fairly thinly. As part of the programme going forward some of these capabilities are being further developed, but there are potentially gaps in capabilities that may persist. There may be questions over whether those should be further enhanced in order to provide a thoroughgoing and more robust capability going forward.

Perhaps the keys are the extent to which particularly recent events may sharpen the degree of issues around how to sustain that balance between whether there is an increased pullback into the Euro-Atlantic space versus the issue of how the Indo-Pacific as an arena develops. There is also the degree to which expectations are met in terms of domestic ambition versus regional expectations, and therefore whether it adds up both in a strategic sense but also in terms of expectations of allies and partners in the Euro-Atlantic area versus those in the Indo-Pacific.

The Chair: Thank you very much for setting the scene.

Q58 **Lord Stirrup:** The Defence Command Paper says that a persistent engagement model will be at the heart of our new approach to tasks overseas, but it is not at all clear what this actually means. How would you interpret it? What would that look like in the Indo-Pacific region, for example? How might the Royal Navy contribute to that? What do you

think of the value of the concept overall?

Dr Sidharth Kaushal: As I understand it, the model of persistent engagement laid out was very much a response to the challenge of presence. One can see a fair bit of capability being devoted to regions on a transient basis, such as the deployment of Carrier Strike Group 21 to east Asia, whereas adversaries are able to maintain a more persistent drumbeat of low-level and sub-threshold activity. Think of the behaviour of China's maritime militia in the South China Sea, or, indeed, some of Russia's more sub-threshold activity in Europe.

The logic of persistent engagement, as I understand it, is that the military would shift to a mode of more constant campaigning, where it would operate at proximity with rivals on a constant basis rather than an emergency basis. Read alongside the integrated operating concept, that boils down into two distinct mission sets. The first would be engagement of partners, building capacity for resistance in areas of the world where perhaps the UK lacks the mass to do so itself. The second would be the capacity to constrain rivals through means short of actual conflict.

What might that look like in practice? The engagement side of things is perhaps easier to flesh out. For example, the Littoral Response Group (South) is envisioned as containing advice and liaison teams within it that are meant to be situated in partner nations, in order to build a domestic capacity for, among other things, operations where the UK can add knowledge, if not necessarily hard capability in regions such as the Indo-Pacific, where it lacks mass. That would involve, among other things, longer cycle deployments, presumably for troops operating in these advisory roles—in other words, them being in-country on a more persistent basis.

When it comes to constraining adversaries short of war, there are a number of things that a navy could theoretically do. It could, for example, contribute to lawfare by supporting a contested narrative. We have seen this not necessarily in a naval context but in an intelligence one, with the pre-bunking of some of Russia's claims regarding Ukrainian provocations before this crisis built up. A navy in a part of the world where there was contestation of a territorial claim might be able to support one side's narrative over the other by virtue of its presence.

A forward-position navy could also act as a tripwire force by virtue of its presence. It could serve to de-escalate a confrontation because escalation required action against it, and thereby a wider escalation of the conflict. We have seen this to a great extent in the actions of the US Navy in the South China Sea, where ships—often not necessarily the most capable ones, such as littoral combat vessels—have been used to support persistent engagement to operate alongside partners in contested waters to shadow the PLA Navy, in a context where they may not be the most credible combat vessels, but, by virtue of their very presence, they change the contours of the operating environment.

In truth, there is still a lot to define in terms of what persistent

engagement means to each of the individual services, but viewed through the lens of what is in the Defence Command Paper and the integrated operating concept, that is the sort of activity that appears to be within its remit.

Nick Childs: In broad terms, I am pretty much in lockstep with Dr Kaushal. The persistent engagement starts with the critical importance in this constant competition environment—and great power competition—of the key to developing and understanding information and intelligence for better decision-making, working with local partners and helping with enhancing capabilities, including potentially to respond to incidents and lower-level scenarios. The maritime provides a very good vehicle for that because of the ability to poise and flex, to be capable and to move without too many friction issues, permissions and the like.

In broad terms it provides a very good capability, including not just in the maritime space, where I suggested a lot of that contestation is taking place, but across the scene. Sidharth mentioned the Littoral Response Group (South). That will be a slightly enhanced capability, with possibly more potential relative to the offshore patrol vessels.

It is critical in the context of this issue of the grey zone, the escalatory ladder and issues around being able to deter, to have presence and persistent, growing awareness, and, where necessary, when issues arise, to be able to both attribute and inform. A key element of this is the ability to operate and respond in the information space when required when incidents arise.

One of the concerns about how this will operate in the long run in the Indo-Pacific is that it is an enormous space. It tends to be referred to in a slightly monolithic way, but it is also made up of multiple sub-regions, and therefore different issues and priorities in terms of security concerns. There are questions even then, with relatively limited resources, of how your concept of operations and your footprint would develop over time.

The second point is the extent to which one can sustain that ambition and deliver the outcomes and the benefits that accrue from that versus the escalation stakes. If you then have to transition towards a potentially more confrontational scenario, are there any demerits in that persistent presence that would make the aggregation or the transitions towards a more serious scenario more difficult? How do you balance those?

Lord Stirrup: Could I put that a little more starkly? We have a Navy that struggles to find sufficient assets to carry out tasks such as the Falkland Islands patrol and the West Indies guard ship. We have an Army that is already down to pretty much what people would consider the bare minimum, and it is going to be reduced further. We have an Air Force that does not have enough combat aircraft. We are talking about important engagement tasks, whether persistent or not, in Africa. We are now talking about a part of the world that, as you say, covers a third of the globe and has many different requirements. We are talking about persistent presence in all these.

In addition, for those sorts of tasks that are mentioned under persistent presence, such as advice and training, people want our advice and training only because they think we are good at core military tasks—fighting and winning. If we do not do those then no one is actually going to want our advice. Given the size of our Armed Forces, is this really a realistic proposition to be a global actor on this scale, even though we are talking about only relatively small forces in each place? Many a mickle makes a muckle.

Nick Childs: That is a key consideration in all of this. In the end it has to be down to choosing, first, where interests are most aligned, and, secondly, where value can be added to the greatest extent. You would have to frame the ambition in that context. There is no doubt that it represents a strain on resources. In a maritime sense, the ambitions, particularly in the IR, will, to some extent, assist in this. There is an ambition to regrow platforms, for example, and particularly some of those capabilities that are suited to doing this kind of mission, thus relieving the other more task force and more high end platforms and capabilities to concentrate on those.

The proof will be in the pudding as this unfolds, in terms of whether those plans in a maritime sense are fulfilled, whether they are sufficient, and whether the demand signals are such that they have to have to look again at what the force laydown and level of ambitions actually are.

Dr Sidharth Kaushal: Yes, I broadly concur with that.

Q59 **Baroness Blackstone:** Earlier this year the First Sea Lord set out his vision for the Royal Navy up until 2035. He argued that, although it is impossible to compete with Russia and China what he called “hull for hull”—I assume by that he means the number of ships—we should therefore focus more on new and innovative technology. Does the defence industrial base have the capacity to come up with ideas for new and innovative technology of this sort? If they do, has the Royal Navy got the capacity to introduce them and use these new approaches? Where is the money coming from? Is there enough?

Nick Childs: The overall proposition as set out by the First Sea Lord is sound. It is one, particularly in a maritime context apropos China’s modernisation, that is faced by all like-minded navies, frankly, from the US Navy downwards. There has been an extraordinary output of modern and expanding Chinese naval capabilities. We calculated a few years ago that pretty much every four years Chinese shipbuilding was delivering, in tonnage terms, something very close to the equivalent of the entire Royal Navy and Royal Fleet Auxiliary put together. The Chinese shipbuilding industry has actually been outperforming even the US Navy’s shipbuilding industry in tonnage terms in recent years, which is a new place for the US Navy to be in.

For all those reasons, in response to China, navies from the top down are struggling with how to respond. It cannot just be in terms of numbers of hulls, although platforms are not nothing in this. You also have to look in

aggregate terms across a range of allies and partners. There must be a sense in which you have some level of capabilities, particularly platform numbers, that, apart from anything else, can be the hubs and potentially motherships for some of these other emerging capabilities.

For many navies this is the answer going forward. It is going to be a combination of some enhancement of platforms. There has generally been a trough and the beginnings of a reinvestment of naval forces, particularly in Europe, but it must also include the introduction of other technologies, which could include combat and information technologies. In many cases people are talking about unmanned systems, surface and subsurface. That is the way to go. The Royal Navy has been doing a lot of thinking about this and is working towards delivering that. There is a very strong technological base in the UK to be able to respond to that.

There are questions about needing to enact this now and implement this vision, and therefore some choices are going to have to be made and bets laid in terms of transitioning. That is a Navy issue. There is some funding available for some of these capabilities. There will need to be additional funding across the board to deliver a number of the key capabilities, particularly on unmanned systems, so that they can be brought in as quickly as possible. That starts right at the very top, with things such as carrier strike, and what the trajectory looks like for actually delivering on carrier strike capability into the future.

It is perhaps furthest in advance in terms of mine countermeasures, but there are other more open ocean capabilities that need to be explored and perhaps delivered. There needs to be a clear understanding of what they can do to enhance capabilities overall and where there are limitations. It is going to be a team effort between some traditional platforms in order to deliver some of the things that uninhabited systems probably cannot; that includes presence for deterrence in some cases, but where it can actually become a force multiplier.

Dr Sidharth Kaushal: The aspiration to use disruptive technology to offset some of the advantages our opponents have in terms of mass is a perfectly reasonable one. As Nick said, areas such as manned/unmanned teaming and the use of novel capabilities in areas such as directed energy for tasks including air and missile defence represent ways in which the UK can offset some of these strengths that we have seen emerging in places such as China. It still maintains some pretty significant advantages in terms of baseline capabilities at the higher level of technological sophistication.

To use a couple of examples, the newest Chinese cruiser, the Type 055, does not have an integrated full-electrical propulsion system, which enables the incorporation of things such as directed energy weapons and rail guns, which emerging Royal Navy vessels such as the Type 26 will have. Chinese authors writing for military journals still write about a relative lack of integration of the systems aboard their vessels relative to western counterparts. Although individually very capable in terms of things such as missiles, some of the soft capabilities onboard vessels, such as command and control systems, are areas in which the UK, and

the Royal Navy in particular, still demonstrate a significant technological advantage.

However, I am somewhat reluctant to assume, as a lot of the discourse does, that this will necessarily stay the case automatically. While it is true that the UK is, on a per capita basis, a more innovative country than China by most metrics, if you look at aggregate metrics of the level of innovation and things such as the number of widely cited peer-reviewed papers in the science and technology-related field produced every year, in many areas China is now second only to the United States. It may not be terribly innovative on a per capita basis and it may not be terribly efficient, but, given the sheer scale, it still produces a great deal of innovation on an aggregate basis.

The assumption that there will be this automatic innovative lead in areas such as science and technology will perhaps be disrupted, both at the level of some of the base level, university-level research that feeds into science and technology, but also because of the Chinese state's capability to use its concept of civil-military fusion to draw on civilian innovations for military purposes much more easily than a democracy can. The assumption that we will stay more innovative is perhaps a riskier one.

This leads to the question of what should be done and how well the Royal Navy's plans for the future align with it. Technology-sharing frameworks such as AUKUS represent a great step forward towards countering that challenge of sheer mass that China provides, by aggregating capabilities with partners such as Australia and the US, which in some areas have moved ahead of the UK. For example, in research on hypersonics and counterhypersonics, one can generate real efficiencies of scale. The exploitation of pre-existing alliances is one important way to offset what could be an emerging reverse technological gap in the favour of China.

The second area is that, while the Royal Navy has spent a great deal of effort on exploratory work in areas such as manned and unmanned teaming, and in some areas such as mine countermeasures it has committed funding to real capability, there is a question. Many of its future platforms, such as the Type 32, are meant to be hubs around which more disruptive capabilities can operate.

There is a question of the degree to which the traditional defence industry provides disruptive solutions. The percentage of income devoted to research and development in a traditional defence sector prime is typically far lower than the disruptive smaller entities one sees in a private sector area in places such as Silicon Valley. There is a question of whether the broader structure of UK defence is entirely well attuned to providing more disruptive solutions.

Having said that, some of the initial steps the Royal Navy has taken in terms of its exploratory work in things such as manned and unmanned teaming, and some wider national-level policies, exploiting existing alliances, could offset what could be an innovation deficit vis-à-vis China in the next two decades or so if something is not done now.

I have not touched so much on the subject of Russia because that is a country that will fall behind navally in most categories of strength, be it in terms of quality or quantity, with only a few areas of excellence such as nuclear submarines remaining within the Russian Navy.

Baroness Blackstone: You were talking just now about burden-sharing with our allies. I wonder whether we should be more explicit about this, and get together with other countries that have reasonably large and sophisticated navies and work out what our priorities are and who might take the lead in some areas. We might take a lead in other areas, rather than trying to do all this innovative technology work right across the piece with each navy operating separately. Obviously a certain amount of it is going on, but should we greatly increase it in order to get longer-term, better outcomes?

Dr Sidharth Kaushal: Ideally, yes. There are probably two barriers to wider co-operation. The first is the sharing of particularly sensitive technology that pertains to the most important capabilities that nations are focusing on. AUKUS, for example, saw the UK co-operate on the development of nuclear submarines, and now we will see it co-operate on the development of hypersonics, but arguably it was possible only because of the pre-existing, very deep Five Eyes relationship and the level of trust that entails.

Beyond that there are actually very few instances—only one that I can think of—of a nation actually co-operating with another on the development of nuclear submarines. The depth of pre-existing relationships is not always symmetrical among allies, so certain forms of co-operation may be politically viable only with certain partners.

That being said, as a general proposition integrating western innovation and industrial bases is a good thing, given the scale of the challenge that China poses and the fact that it has such asymmetrical advantages in terms of its level of civil-military fusion. I absolutely agree with that as a general sentiment.

Nick Childs: Just to pick up one point and add another, Sidharth is right. Objectively, there is absolutely room and logic for greater collaboration and integration, and that is happening in certain spaces. He mentioned AUKUS, which is not just submarines but underwater warfare, hypersonics and some of those high-end capabilities. There are common areas where the UK's allies and partners are seeking to retain advantage, but there are some where they are seeking to regain advantage. One of those areas is in the broader context—it keeps coming up—of how to increase lethality and particularly offensive capabilities, including in innovative ways, which has been a bit of a deficit across the alliances and partners.

There is the logic there. There is the barrier that Sidharth mentioned of differentials in terms of standards, and, to some extent, levels of secrecy. You find that in the UK and the US being able to collaborate as much as they would like with France over carrier strike capabilities. The US and UK

have fifth-generation capabilities; France, as yet, does not. That is an area where some work needs to be done, because there is a broad agreement that being more integrated is a way forward. It would be a particular problem for the UK, and probably other NATO countries, if the United States, a critical ally, was innovating to the extent that it was almost steaming off over the horizon in some areas, making it more and more difficult for others to join, combine and integrate going forward. There is that operational challenge of being in lockstep.

The other challenge is that innovation is not a destination; it is a mentality. Given that technological advantage is a very finite thing now, and getting even more finite, this is something that is going to be with us persistently.

Q60 **Baroness Rawlings:** At one of our meetings, a previous witness suggested that the Royal Navy is "the service that is benefiting the most from the current investment". On 21 February, the Ministry of Defence published the *Defence Equipment Plan*, which lays out its procurement objectives for the next decade. Does this reflect the ambitious agenda set out for UK maritime forces by the Integrated Review in the next decade, and does it reflect the review in the Defence Command Paper? Have these ambitions survived contact with financial realities in the year since they were published?

Dr Sidharth Kaushal: In terms of the broad ambitions for tasks such as shipbuilding and the number of hulls that the Navy should have available to it over the next decade, it is reasonably well equipped to meet the ambitions laid out for it during the Integrated Review, although it does face a trough in capability in certain areas. For example, escort vessels are out towards the middle-to-late point of the coming decade.

The second point is that the uncommitted funding in the equipment plan will be of particular note, particularly when projects to integrate some of the capabilities that the First Sea Lord laid out as offsets to the UK's relative lack of mass come on board, or to the extent that it is used to meet those objectives. That will provide a significant part of the answer.

There are also questions regarding some of the financial assumptions upon which the plan was based and whether they remain valid in a decade of potentially high inflation. I could not necessarily comment with a great deal of expertise on the impact of inflation on the overall financial and equipment plan. Broadly speaking, the equipment plan as it is laid out meets the aspirations set by the review and the Command Paper. Whether it meets the aspiration for a transformation of the Navy's force structure over the next decade remains to be seen.

Nick Childs: I broadly agree. There has been a shift of the pendulum, to some extent, in terms of investments in the different domains, particularly coming out of the Integrated Review. In terms of conventional forces and their capabilities, the Army still has a larger part of the equipment plan going forward, but the Navy is seeing some reinvestment. The general naval capabilities in the plan do not include

the nuclear organisation and delivery, and clearly that is a significantly maritime element.

So far, in key areas it looks as though the plan is beginning to deliver. The new frigate programmes are moving forward and seem to be on budget, more or less. There are questions about particular capabilities that are seen as being key and have yet to materialise, such as the multi-role ocean surveillance capability, how that is going to be delivered and what it will amount to. There are also questions also over the future of the float support and the introduction of the multi-role support ships that will be the recapitalisation of amphibious capabilities going forward.

In the interim, what is happening to deliver on the ambition to renovate at least one of the landing ship dock auxiliaries, the Bay class, to provide that Littoral Response Group capabilities? I have a concern that is disappearing, but we will see how that works going forward. There are one or two issues there.

The bigger issue is perhaps what the trajectory of the nuclear element will be, both in terms of the deterrent, which is clearly the top priority, but also the general attack submarine force and what the bills for that will look like. They are critical capabilities but they are still a work in progress in terms of delivering into the future.

Baroness Rawlings: We spent an afternoon at the IMO, the International Maritime Organization. I wondered how important it was to you.

Nick Childs: As an element in what is a broad picture it is very important, in the sense of going back to what the challenge is in the maritime space will be in terms of constant competition. It is across a broad spectrum of contestation, potentially, in the maritime space. It seems that is understood as far as potential adversaries are concerned.

The ultimate benchmark is China, which, from the perspective of a traditionally continental power, is embracing the broad perspective of maritime power and what sea power means to a significant degree. This does not just include naval capabilities at the top end, in the form of the People's Liberation Army Navy, but goes right down through the coastguard, the maritime militia, the merchant marine, fishing, and right through to port ownership and access. It is a broad sweep, and one has to be conscious across the spectrum that that is the challenge. Being able to respond up the rungs of escalation and activity in every space will be a key part of being able to respond effectively.

Dr Sidharth Kaushal: I broadly concur on that point.

Q61 **Lord Boateng:** When we look at events in Ukraine, and Russia's conduct in seas that they regard as its own, what are we to make of the maritime threat that the situation demonstrates? What does it mean for our own capacity and capabilities, and what are its implications for the so-called Indo-Pacific tilt?

Dr Sidharth Kaushal: In terms of the maritime threats that Ukraine underscores, two really stand out. The first is the much wider systemic ramifications that a maritime blockade of a key choke point in the world economic system can have. We are seeing this off Odessa right now, where the Russian Navy's ability to prevent the export of Ukrainian grain could cause a wider food crisis in a number of fragile states around the world. That speaks to some of the wider strategic ramifications that a maritime clash can have, both for intended and unintended reasons.

I would argue in this context that the blockade of Odessa and the consequences it has further afield certainly give Russia a degree of leverage over Europe if a long-running blockade can cause instability on Europe's periphery, and thereby perhaps give some of Ukraine's partners an incentive to pressure it to sue for peace. It serves as a very useful political tool, but a maritime clash could also have a number of unintended disruptive consequences for global supply chains.

You mentioned the Indo-Pacific. One study conducted a few years ago suggested that the effective supply chain disruptions in the context of a maritime clash in the South China Sea—it was viewed within a US context—could be upwards of 17% percent of GDP in one year. One could expect similar ramifications in Europe. One aspect of the maritime threat that the conflict in Ukraine has highlighted, is something that maritime theorists have known for a long time: that sea lines of communication are vital for trade; what happens to them inevitably has significant economic ramifications.

The second thing I note is that, although the Russian Navy has become a much less capable force than it was at the end of the Cold War—it can no longer build large and complex vessels, and those that it had in the Black Sea were its inheritance from the Soviet Navy—it has none the less become very good at one thing, which is supporting precision strike campaigns. Everything down to the very smallest vessels in the fleet's force structure, things such as corvettes, are equipped with Kalibr land attack cruise missiles, which have around a 2,000-kilometre range. With these capabilities Russia has been able to do a great deal of damage to critical national infrastructure across Ukraine from relatively safe bastions.

That is relevant in a broader NATO context, because, although we are unlikely to see the Russians ever contest the open ocean in the event of a clash with NATO, except in certain areas—for example, undersea warfare—we can expect that even a relatively weak surface fleet, if it is equipped with an almost universal Kalibr missile strike capability, can pose a real threat to critical infrastructure across Europe from relatively safe positions near Russian shores. It does not necessarily need to be a blue water fleet to have effects at long reach. That is a real challenge that that fleet poses. It reflects the Russians, in some ways, investing a limited amount of money and capability quite cleverly.

Nick Childs: To amplify some of the things that Sidharth has said, the longer the war persists, the more strategically critical this issue of the

blockade is likely to become. That will increase pressures on a number of fronts. One of those fronts is, given the broad aspirations and value statements around rules-based order, freedom of navigation and so on, in broad terms, particularly for NATO but for key NATO players, that allowing the Black Sea to become more and more a Russian-dominated lake will become increasingly challenging.

On top of that, there will be increasing pressures from those NATO Black Sea members for the kind of reassurance that others are receiving, and therefore increasing issues around what can or should NATO do in the context of reasserting both those policy and strategy pillars.

Broadening that out in the NATO context of coherence and deterrence, there is the issue that Sidharth mentioned. Within a certain frame Russia still has very capable naval forces that can potentially challenge and pose issues, and lean on the deterrence side to NATO around the Euro-Atlantic space. This is because of the capabilities it has and the potential it has to threaten national critical infrastructure across Europe with these land attack capabilities. That threat of horizontal escalation and therefore needing to be able to deter, respond and insure will continue to be an issue.

Broadening it out further, what happened to the Russian Navy, and in particular the cruiser "Moskva"—the Black Sea Fleet flagship—also potentially creates ripple effects in terms of the circumstantial evidence. The cause of it appeared to be coastal defence anti-ship missiles, which crippled the ship and then it subsequently sank. As people unpick all this, there are particular circumstances around the crippling of "Moskva", her preparedness and response and so on, but there is also a general potential lesson out there: it is a reminder of the potential lethality of precision strikes for naval forces projecting forward and operating in the littoral.

The fact that these capabilities are proliferating, both at the high end but also in terms of lower-end threats that could, with relatively limited capabilities, threaten choke points such as the Bab-el-Mandeb, the Suez Canal or the Strait of Hormuz is a challenge for navies generally. Yes, they will argue they would not operate in that way, but the bar is rising and the proliferation is growing, so it is posing more issues for navies generally in being able to operate in the littoral space around the world and how to respond to that. A lot of that has to do with an operational posture, but also investing in capabilities, and for those capabilities all to work in order to be able to operate safely and effectively.

Lord Boateng: How to respond to that? If I can pursue that, Mr Childs, you mentioned earlier the need for us always to have China's capabilities in mind as the ultimate test in terms of capabilities. If you look at China in the world today, it has invested in Sri Lanka in terms of port capacity. We are told and understand that it is about to invest heavily off the coast of west Africa. It takes a great interest and is putting a lot of money and diplomatic effort into the Caribbean. What are we to make of that? How should we respond to that particular capability on the part of China and

the threat it presents to our interests?

Nick Childs: It goes back to a point I was making earlier. There is this spectrum of challenge and a ladder of capabilities and responses that are available. China is absolutely out there, and developing presence and interests that are significant, growing and getting closer in lots of ways, such as the Arctic and Europe. Part of the response goes back to that being a vindication of the persistent engagement approach and being out there as well, even with only limited capabilities that can at least demonstrate a presence and engage.

I was a bit sceptical about the value of the OPVs in the Indo-Pacific, but arguably they are already showing their value. For example, the fact that one of them was able to turn up in very short order to respond to the natural disaster in Tonga had ripple effects. Being there and engaging is part of that, and in the Caribbean as well. That is partly a vindication of the persistent engagement approach. Part of that is also joining it all up. There are elements in which China is expanding its footprint with investments, but in some respects it has also proven to not be very good at soft diplomacy.

Lord Boateng: Why do you say that? What evidence is there that China is not good at soft diplomacy?

Nick Childs: It is the fact that there are now question marks and concerns around some of the investments it has made and what the price of those is in terms of future commitments and engagements of the recipients. There are at least question marks around that. All I am saying is that part of the response is this integrated approach, and it is the persistent presence that will help deal with that.

Coming after that is what will happen to the hard power elements of China's maritime capability. It has a very significant capability that it has to develop that presents considerable challenges in terms of contested environment operating within the First Island Chain. There are questions around how that will develop further afield in the future as its hard power naval capabilities also develop. That comes back to the questions of, in the longer term, what that will mean in terms of the minimum naval presence that will be both credible and added value for the UK and other partners that also want to operate in that space.

Dr Sidharth Kaushal: Just to add to that, on Chinese engagement further afield beyond the so-called First Island Chain there are two interrelated challenges one wants to look at. The first is the commercial challenge. For example, 16 of the world's 20 busiest ports are owned or partially owned, and in some cases wholly operated, by Chinese companies. That is an element of what Nick described as the broader elements of sea power. It is not naval power per se.

It is arguably not a problem until it becomes a monopoly. Finding a commercial riposte to it becoming a monopoly becomes the key priority for the UK. Here, linking with countries such as Japan, which, through its

own free and open Indo-Pacific concept, wants to offer countries around the region optionality in terms of investments, may be the commercial element of this strategy.

The military has a role. The role is that security engagement and provision may be an offset to the influence that Chinese commercial dominance can provide in certain countries. You think of somewhere such as the Persian Gulf, where arguably China is already a pre-eminent trading partner, but the fact that western nations, the UK included, are still key security providers is actually a significant offset to what might otherwise have already been a very China-tilted Gulf area. That perhaps provides some of the rationale for the sorts of missions we think of under persistent engagement and things such as training.

The second aspect of the challenge is the harder elements. China thus far has abstained from building explicit military bases further afield, Djibouti notwithstanding, but it has focused on what many suspect are dual-use facilities and capabilities. Here, persistent engagement and having forces in-theatre is quite important to developing an intelligence picture. We can use the sometimes quite niche knowledge regarding these facilities and what the markers of a military facility or a military-capable facility might be that militaries themselves, the Royal Navy included, possess, to, first, build an information system picture within the UK regarding the potential evolution of what are now ostensibly commercial Chinese capabilities, and, secondly, make the case to allies and partners.

To use a Cold War example, the system of CoCom export controls relied quite heavily on military expertise to recognise what technology was potentially dual-use, and thereby worthy of export controls. It required military professionals to be engaged with the process on a quite persistent basis.

A similar rationale might integrate having forward-position troops engaging in-country, both to build a picture of what is occurring within it but also to use their rather niche expertise to inform the UK and allied response to what might eventually be a harder form of Chinese power across the wider Indo-Pacific.

Q62 **Lord Teverson:** You have mentioned AUKUS. I am trying to understand how important that agreement really is. It sounds impressive. It has 17 working groups. It has a number of aspects, as you say: undersea capabilities, quantum technology, AI and advanced cyber. All of that sounds great, but what is the practical effect of that? Is it on the Royal Navy? Is this something that is going to get bigger in the future, or is it something that will lose its profile after a while?

Given the change of Government in Australia, I was looking at the Labor Party's manifesto. It actually mentions AUKUS. Are we confident that the Albanese Government will keep that same importance of this agreement?

Nick Childs: It is potentially important in the longer term for the UK in terms of capability enhancement, precisely because of some of those areas that you mentioned; for example, the underwater battle space,

which is a critical area, and potentially hypersonics. There is ambition there, both because of the challenges it represents but also the opportunities it represents in restoring some of those lethality questions.

It is also on the submarine front. Although the UK is a significant player with significant capabilities, it has been bumping along the ragged edge of being able to sustain that capability. There is an opportunity as part of AUKUS potentially to become part of a bigger whole in terms of some economies of scale going forward in regenerating the UK's nuclear submarine capability and sustaining it in the longer term. There are some advantages to that, which could be key.

There are risks as well, in not allowing the pull of AUKUS to somehow complicate things going forward. It is an important balance, but there is real potential there. I am not an expert on Australian government, but I get a sense that, at least as far as the Labor versus Liberal parties were concerned, it was a relatively politically neutral element. The fact that the new Government are a majority Government means that there is likely to be stability. In a way, there has to be, because there is no doubt that for this to work it is going to have to be a national effort over a sustained period, with sustained political will on all sides.

Dr Sidharth Kaushal: In a strategic sense, because the US Navy is facing a shortfall in its submarine numbers in the next decade, an Australian nuclear submarine force could actually be quite pivotal. More importantly, if AUKUS as a deal works as intended it illustrates how the UK can perhaps have influence without mass in places where it will never commit large forces. That is through the ability to transfer technology, which has a much more lasting effect than the transient deployment of high-end capabilities that must eventually be recommitted to Europe. As a strategic concept it is actually a very good example of the logic of constraining an opponent without directly confronting them. We see that reflected in a number of both military and policy documents.

Regarding its value in terms of economies of scale, given some of the problems the UK faces, generating certain capabilities that the Royal Navy has deemed critical, hypersonics being a good example, really could not be done outside the context of a partnership with countries such as the US and Australia. Both have pedigree in this area, but are also willing to share information on these fairly sensitive capabilities and create some very important economies of scale, as Nick said. Broadly speaking, there is a lot of value added.

There are two potential challenges. The first is the potential for competition for talent amongst AUKUS partners, which could strain capacity, given that human resources are a limited asset in each country. The second is managing expectations and ensuring that what is viewed as a very important technology-sharing framework is not misconstrued as an alliance, and does not lead to mission creep. Broadly speaking, it delivers a lot of value.

I cannot add much value on the subject of the new Australian

Government, unfortunately.

The Chair: Thank you very much indeed to our expert witnesses. You have helped us focus in this session on the issues of maritime security and the development that we are going to see as a result of the Integrated Review itself and the Defence Command Paper. It very much feels as though there is so much that can be done. It takes time to think how to do it. When we reach a position where a hostile actor take action against this country, time runs out—as it has done today. Thank you very much indeed. I formally close the session.