



International Relations and Defence Committee

Corrected oral evidence: Implications of the war in Ukraine for UK defence

Wednesday 28 February 2024

10.45 am

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Members present: Lord Ashton of Hyde (The Chair); Lord Alderdice; Lord Bruce of Bennachie; Baroness Coussins; Baroness Crawley; Baroness Fraser of Craigmaddie; Lord Grocott; Lord Houghton of Richmond; Lord Robertson of Port Ellen; Lord Soames of Fletching; Lord Wood of Anfield.

Evidence Session No. 1

Heard in Public

Questions 1 - 10

Witnesses

[I](#): Professor Malcolm Chalmers, Deputy Director-General, RUSI; Shashank Joshi, Defence Editor, the *Economist*.

Examination of witnesses

Professor Malcolm Chalmers and Shashank Joshi.

Q1 **The Chair:** Good morning and thank you very much for coming. We are grateful to you for spending this time with us. This is our first evidence session on a new, short inquiry that we are holding into the impact of the war in Ukraine on UK defence two years after the invasion. We will consider what interim lessons, both strategic and operational, can be drawn.

This is a public session and is live on the Parliament website. A transcript will be taken; we will send it to you in case there are any changes to matters of fact that you want to make. I remind Members to declare their interests if they have any and they are pertinent to the inquiry when they first speak. I also ask our witnesses to give a brief introduction when they answer the first question. I know that you are probably old hands at this but we have quite a lot to get through in around an hour. I ask members of the committee to keep their questions short; the witnesses' answers will be exactly the right length but not too long.

I want to start by looking at this slightly more strategically to frame the discussions about some of the more operational issues. How do you think the nature of the threat from Russia has changed as a result of the invasion of Ukraine? What are the implications of that for our deterrents, both nuclear and conventional?

Professor Malcolm Chalmers: Perhaps I can start. I am the deputy director-general at the Royal United Services Institute, which is just down the road on Whitehall. There is a long answer to that question but let me try to be as brief as possible.

On the one hand, the invasion of and events in Ukraine have revealed a degree of Russian willingness to take strategic risks; on the other, it has revealed a Russian military that is weaker than we thought it was before the invasion took place but has both a degree of resilience and the ability to sustain conflict over a long period. It is worth remarking on that.

On the implications for deterrence, so much depends on how this war ends. As long as the Russian conventional forces are tied down in a gruelling, high-casualty war in Ukraine, they pose relatively little threat, certainly in terms of invading other countries, including NATO countries. The concern, of course, is around how the war will end. If it ends in a way that involves a Ukrainian loss and a Russian victory, to a lesser or a greater extent, will those circumstances mean that the appetite for risk on Russia's part will increase rather than decrease? Given time, Russia will be able to mobilise forces that, over time, can pose a renewed threat to NATO alongside that increased risk.

My last remark on that second point would be that for a long period after the end of the Cold War, Russian defence budgets were relatively limited. There was a significant uptick after 2008 but it is only since this war started that we have seen a massive increase in the resources that the

Russian state is putting into defence. Over time, that really will make a difference.

Shashank Joshi: Thank you. I am the defence editor at the *Economist*, where I cover defence, national security, intelligence and all the other nasty things going on in the world, from Taiwan to Ukraine. I echo everything that Malcolm said but I want to make a few quick points.

First, the war has revealed a very insular Russian leadership that may have been pushed into making this rash decision by its own insularity and inability to gather high-quality information on both the nature of its influence in Ukraine and the way in which its invasion would have progressed. That is in part due to the failure of its intelligence agencies in echoing to the regime what it wanted to hear. It has also revealed some radical but sincerely held views in the Russian leadership about Europe and its environment. I urge us to focus not just on Vladimir Putin but on people such as Nikolai Patrushev, the chairman of the Russian Security Council, who has made statements and comments that I believe are probably sincerely held and reveal the degree of deep, profound paranoia, which should be a source of concern.

Secondly, on Russian rearmament—Malcolm mentioned this—Russia is significantly weakened at this point, as we heard yesterday from Admiral Sir Tony Radakin in his speech at Chatham House. As Malcolm alluded to, Russian rearmament now involves spend of 6% of GDP and 30% of the federal budget on defence, and is occurring on an accelerated timescale. If you look at the Estonian annual intelligence report, published a week ago—it is a very thorough document—you will see that it points out that NATO will face a “Soviet-style mass army” with reconstituted forces in the military districts adjacent to Finland, such as Leningrad, in a short period of time. In the long term, we face a Russian reconstituted threat that is now inoculated against modern high-intensity warfare in the form of Russian production of advanced UAVs and drones, as well as tactics honed on the front lines—experience that we in the West do not have in the same way, of course.

Thirdly, briefly, there are thicker Russian connections to other adversaries, notably to Iran in the form of Shahed drones and in the mass production of those UAV attack drones inside Russia. Also, we must reflect on the extraordinary fact that the biggest external supplier of shells to Russia right now is North Korea. The relationships with Iran, North Korea, Belarus, Kazakhstan and others represent a strategic change in the Russia and the environment that we face, as well as in Russia’s own strategic depth. We mock this as Russia’s resort to these rogue states. I believe that we should not mock it; it shows its own strategic depth.

Fourthly and finally, we face a Russia that, because of its enduring conventional weaknesses, at least in the short term, will be more reliant for its own security on nuclear weapons, including its large arsenal of non-strategic or tactical nuclear weapons, some of which were discussed

in the *Financial Times* this morning.¹ That is a structural change that we face in assessing the Russian threat.

Q2 Lord Robertson of Port Ellen: I will ask about the whole question of nuclear deterrence, because it has been brought into sharp relief. The Budapest memorandum was the deal done by Ukraine to get rid of its post-Soviet nuclear weapons, when it was the third nuclear nation in the world. It turned out that the memorandum produced no security at all.

What does that now mean in a world in which NATO depends on the United States nuclear umbrella over Europe, plus the British and French nuclear deterrents, only one of which is committed to NATO? What are the implications of that in a situation where there is a fear of escalation in the West that, if we go too far, the Russians will default to what you have just said, their nuclear defences, especially the tactical nuclear weapons that they have in large numbers?

Professor Malcolm Chalmers: It is an excellent question. One of the most important features of this conflict is the nuclear shadow there has been over it from the beginning. The basic features of this conflict have been defined by the existence of nuclear weapons. There has been no war since the Korean War of two nuclear weapon states fighting each other. There have been lots of conflicts in which such interests have been opposed but, in every one of those cases—Afghanistan, Vietnam and, recently, Syria, to some extent—the Soviet Union and the United States, Russia and the United States, India and Pakistan, and others have sought ways to avoid escalation to nuclear conflict.

We should never analyse this war or, indeed, the potential for war in Europe as if it is only conventional. One of the risks of using one of the parallels that people draw with major-power wars of the past, such as World War II, World War I or whatever it might be, is to ignore the nuclear dimension. In its nature, it limits the extent to which major powers can have absolute objectives. In a nuclear world, in which an opponent has nuclear weapons, what happened in 1945, the occupation of Germany, is not an option—the occupation of China, Russia or wherever it might be. Everybody realises that, so the nature of wars is that they are limited.

Coming to your question on NATO's nuclear deterrence, there were moments in this conflict where it felt that Russia's primary objective in reminding us of its nuclear weapons was to deter direct NATO involvement in the conflict. It did so successfully. Both President Biden and Donald Trump have made it clear that avoiding a direct war with Russia is a very strong priority.

The other, more credible scenario in which there was a concern about Russia's use of nuclear weapons in Ukraine is one where Russia, in conventional terms, was losing the coherence of its forces, perhaps facing the loss of Crimea. Everybody can guess where those red lines would or

¹ <https://www.ft.com/content/f18e6e1f-5c3d-4554-ae5-50a730b306b7>

would not be. It is less of an issue now, given the stalemate on the ground, but that possibility is still there.

There is a debate here about the extent to which we are talking about the tactical use of nuclear weapons or their use in a strategic fashion. My view is that the use of nuclear weapons strategically is a greater danger and, actually, rather more likely than their tactical use. Tactical use suggests that the use of nuclear weapons on the battlefield will give you some conventional war-fighting advantage. That is less of an issue if Russia were to use nuclear weapons in the context of Ukraine or, indeed, a conflict over the Baltic states or whatever it might be. It would totally change the language of a conflict and create a very strong incentive to bring it to an end as rapidly as possible.

We in the West would be faced with a very difficult cost-benefit calculation: are we really prepared to put our citizens, in our countries, at risk for whatever the issue at stake is? We can ask the same question back to Russia in terms of our nuclear forces. It can become a game of chicken of the sort we saw with the Cuban missile crisis, when the enormous pressure to come to a political settlement arose out of the realisation, by both Kennedy and Khrushchev, of what the consequences might be of a nuclear exchange, for which both were mobilising.

What does that mean in terms of NATO? NATO does gain from the fact that there are three centres of nuclear decision-making. There are three Heads of State or Government in the United Kingdom, France and the United States who have the potential to independently launch nuclear attacks. In the deep, incredibly worrying and confusing sort of crisis that we are talking about, a leader in the Kremlin has to factor in all those three decision-makers, not just one, even if there were doubts, in particular about a future American President who may be unwilling to take that risk. Can the Russians also be sure that future UK and French leaders, who arguably might have more at stake in a European crisis, might not do that?

Given that, one question to which I do not have an answer, although it is very important, is how far the scale of nuclear forces matters. Both the UK and France seek, and I think have, the capability to inflict massive damage on Russia in a second strike, given the invulnerability of their submarine-based forces. They have arsenals only 1/10th of the size of the US's and Russia's, but does that matter as much as people sometimes think? I am not sure it does. What matters about UK and French forces is that they are independent and invulnerable to pre-emption. As long as they maintain those two characteristics, they will be an important part of the deterrence question for Russia.

Shashank Joshi: I will add a small coda to that: the issue of non-strategic weapons is rising in prominence for a variety of reasons. Although I agree with Malcolm, there is an argument that says that, in a world in which the US's extended deterrence umbrella over Europe is in question, whether because of an isolationist President or other factors, the nature of the UK and French deterrence, separate to their size, raises

some awkward questions. They come from the fact that France has a dyad: it has a sea-based leg, as we do, and can also use air-launched missiles without compromising the location of its SSBNs—ballistic missile submarines.

The UK case is somewhat different. A question would be asked about whether the UK would be able to engage in sub-strategic use without compromising the location of its submarines. The question therefore arises in Europe of not just whether the UK and France have adequate weapon stockpiles to preserve deterrence against Russia, in the absence of the US strategic deterrent, but whether they have adequate sub-strategic capabilities. That has given rise to some discussion over the years about whether the UK should contemplate a separate air-launched leg as well. All these questions are quite hypothetical until such a time as the US commitment is in more doubt.

The Chair: I should have said that two or three members will have to leave early to go to a memorial service, so please do not be offended if several people walk out. Lord Grocott is one of them.

Q3 Lord Grocott: It is nice to get in early. Thanks for your evidence so far. My question is about the type of war that is being fought in Ukraine. In shorthand, I suppose you could say that it has all the characteristics of an early 20th-century war being fought in the 21st century. What implications does this have, bearing in mind that, as far as this House is concerned, we recently had a Select Committee focusing entirely on autonomous weapons systems, AI, cybersecurity and all those kinds of things? I do not think that the committee made this assumption but there is the possible implication of future warfare being dramatically different from how it has been in the past. I would like your take on that. As it has developed, has the war—its nature and its methods—come as a bit of a surprise to people whose role in life is to anticipate these things? What implications does that have for our defence strategy?

Shashank Joshi: Can I kick off on that? In the 1990s, the dominant idea in military science was the so-called revolution in military affairs. The idea was that sensors, satellites, computer networks and precision weapons would mean that wars looked like the first Gulf War, with rapid, swift, decisive battles. In this war—certainly, to our surprise—although those tactical principles have been true, we have seen unprecedented levels of sensing, with precision weapons available to all, right down to the lowest tactical levels and at very low cost. The effect of this has not been any kind of clinical, swift war of manoeuvre involving breakthroughs or large movements; in fact, it has been a static, positional war of attrition.

What I take from this is that technology can amplify the effective mass. If you have drones overhead, your small stock of shells can be directed more precisely and will go further, shell for shell. It can complement your mass but it does not replace mass. Even if you can fire shells more precisely, if both sides are using modern technology such as sensor networks, drones and AI—as we are seeing on the front lines today—the

result may be relatively indecisive. It does not obviate the need for large stockpiles because you will never have enough advanced, high-end munitions to hit all the targets you see; you will always be reliant on large-volume, cheaper munitions in some fashion or other. We see this not just in Ukraine but in Gaza where the Israel Defense Forces, having relied almost exclusively on precision-guided munitions in the first week of their campaign, have been using a greater and greater proportion of unguided munitions later on, in part to conserve their limited stockpile of those advanced munitions.

Overall, the lesson is this: technology is essential but, if both sides have it and are employing it, it does not mean that you can have small, lean, boutique forces because they will get chewed up over time.

Professor Malcolm Chalmers: Perhaps I could add a couple of facts to that. I very much agree with what Shashank said. Every war is a surprise to careful analysts because every war is unique. A lot of what happens is contingent. It was not inevitable that Ukraine survived the initial assault. Things could have gone in a very different way—in Kyiv in particular, given the commitment of the Russian special forces to assassinating the leadership. If the leadership had all been taken out in the first few days; if there had been a collapse in the coherence of the Ukrainian command structure; if Ukraine had not been able to save a large part of its air force from the Russian offence; and if the war in the north had been more similar to the war in the south, where the Russians made massive gains quickly, we could be looking at a very different world. That is my first point.

One of the main reasons why that did not happen, of course, is the sheer size of Ukraine. Despite the fact that Russia made significant gains at the beginning of the war, it had a lot further to go. Even a large, capable army like Russia's found its forces spread over a very large perimeter. It significantly reduced the size of its front line later on in the conflict but, initially, it tried to take the whole country quickly and, partly because of the spread of its resources, failed to do so.

On lessons for the future, there are not many countries as large as Ukraine. If you are talking about one of the Baltic republics or Moldova or wherever, there is much greater potential for a concentration of forces by an adversary.

Another feature that we should not forget and which explains part of the nature of the war up to now is the fact that both sides have relied to a large extent on stocks of weapons, delivery systems and munitions inherited from the Soviet Union, especially at the beginning. These were built not by Russia or Ukraine but by the Soviet Union, which had those stocks. Indeed, a lot of the imports from countries such as North Korea are quite old—something that is quite unusual about this conflict and which I do not think you would see elsewhere. In other conflicts, you often find yourself running out of more modern munitions quickly and not having those older munitions. Most of the casualties in the war so far have been as a result of artillery. Even with all the drones and so on,

which have played an important role, the most important weapons in this war have been artillery pieces; that is why restocking shells is so important.

My final point adds to Shashank's remark about the revolution in military affairs. Most western countries do not want to prepare to fight a war with Russia like the war that Ukraine is fighting. Ukraine is fighting the way it is because it has had to do so but, from a western point of view, it would be much better to put a lot of emphasis on ensuring that we have superiority in air power so that we do not have to fight a two-year, gruelling war, with the level of casualties that Ukraine has had to suffer.

Q4 **Baroness Coussins:** I was going to ask my question later, but it follows on so logically from this one that I think I should ask it now. Reports have suggested that, so far, cyberwarfare does not seem to have played a significant part at all in the war in Ukraine. Do you think that that is accurate? Do you think that it is surprising? What conclusions would you draw about the role of cyberwarfare in a major conventional war?

Shashank Joshi: We have to be very careful about inferring activity from outcomes. Cyber operations on the Russian side have been intense, frequent and on a large scale but they have not had decisive effects. The reason why is in part down to shortcomings in the way in which Russia has conducted offensive cyber operations. Much more importantly, though, it is down to the remarkable success of the Ukrainian defence.

That success is rooted in a number of other factors, including the incredible level of assistance given to Ukraine from the outside, both by states and their cyber agencies—in this country, by GCHQ, the NCSC and others; in America, by Cyber Command and the NSA—and, equally importantly, by cyber-threat companies such as Microsoft, the Slovakian company ESET and Google and its cyber-threat arm, Mandiant; that brings us to a wider point about the role of commercial actors. These companies have aided Ukraine in building a world-class cyber defence that blunted Russia's initial attacks extremely successfully.

However, Russia did not stop; it continued to adapt. If you look at the recent reports published by Google, which are well worth reading—they are somewhat technical but you can parse them—you will see that the GRU, among other Russian agencies, has adapted by finding new, innovative, agile ways to continue attacking Ukrainian infrastructure. It does not result in the lights going out or Zelensky being silenced because Ukraine is mounting a phenomenal defence. We have to learn this lesson—not that cyber is a sideshow or an irrelevance—because, as in so many other areas, what we are seeing is that there is sometimes a lot more going on beneath the surface.

Professor Malcolm Chalmers: All I would add is that there is sometimes a temptation in military affairs to think that an old technology is being replaced by a new technology. It is much better to think of a situation in which the orchestra of military instruments is widening. It is

not artillery being replaced by drones, tanks or cyberweapons; it is all of those.

The key to military success is very often combining those. That makes the job of a military commander a lot harder, because they have a much wider range of instruments at their disposal. This is a war between two opponents which, in many respects, are quite equally matched, so whatever one side does the other side will find an answer to quickly. Agility is absolutely key.

Q5 Lord Soames of Fletching: Gentlemen, thank you very much for a fascinating evidence session. Reverting to the kit question, how feasible is it for the United Kingdom and its allies to maintain larger weapon stocks and the industrial ability to deliver them, which can be ramped up for the future? If you agree with that, what would be the trade-offs?

Professor Malcolm Chalmers: That is an excellent question. The short answer is that it is certainly possible but, in the UK more than in some other countries, we had a long period in which we have optimised our forces for expeditionary warfare. In those situations, the usage of stocks was relatively limited. In some areas, we have not had an opponent at all and have not had to worry about, for example, air defence. We are now trying—maybe not quickly enough—to reorient towards peer competition, which requires much more of many things.

If you are simply looking at weapon stocks in isolation, the cost can be manageable. Most of the defence budget goes on personnel, new kit, the maintenance of platforms, infrastructure, and so on. Even if you doubled the amount you were spending on munition supplies, it would not break the bank as a proportion of the total defence budget. Of course, there may be other things you need to do with other components. Nevertheless, if you prioritise this, you can make a real difference.

The US and European industries are beginning to gear up in this regard, albeit more slowly than we would like. Shashank probably knows the detail better than I do, but the expectation is that, by 2025, there will be a much higher production of artillery and other things that are critical to Ukraine.

However, I add a note of caution in distinguishing between the mass production of things such as artillery shells, on the one hand, which are fairly standard products with standard designs—there are real issues of industrial capacity, raw materials and so on, because everybody is trying to get them at once—and stocks of more expensive high-end items, on the other. For cruise missiles such as Storm Shadow and things of that nature, the unit cost is significantly higher and the level of sophistication and skill necessary to produce them is greater. They are also a priority, but the costs are more significant.

Shashank Joshi: I have a few points in response. First, it is not just feasible but imperative to maintain larger stocks. Everything I hear from army and other sources is a grave concern about the level of present

stocks, which has to be addressed. Deterrence depends on signalling that you have credible military forces. If you have kit or weapons without the things that enable them—whether that is ammunition, the intelligence platforms to target them or the spare parts to maintain them in the field—you do not have deterrence. The Russians read the same things that we do and they know the state of our forces, to some degree.

Secondly, we should think about this not on a national basis alone but on an allied basis. We are seeing some welcome initiatives on joint procurement; for example, the huge purchase of interceptors, the Patriot missile batteries, across Europe, between the Germans and the Dutch. It is that purchasing at scale that will enable us to restock these arsenals sustainably, rather than on a boutique national basis. That is essential and depends on a degree of standardisation. We have learned that we cannot have 155mm ammunition that is not standardised across NATO guns. It is ridiculous to be in such a situation, even if it has arisen for good reasons.

Finally, we ought to think of things not just as national ammunition stockpiles for our own use, but as allied stockpiles. I mentioned earlier that North Korea is the biggest provider of shells to Russia. It is equally remarkable that the country that underwrote Ukraine's offensive last summer was South Korea. How, as Europeans, have we allowed such a situation to arise, as generous as it was of South Korea to have entered into such a deal with the Americans to do this?

In the event of a Pacific conflict, the time may come when we, the UK, and other European allies—the Five Eyes and western countries—are called upon to aid Indo-Pacific allies, or those from other parts of the world, to sustain their forces with ammunition, parts and kit. We have to think about it in those terms—allied solidarity—as much as our own domestic war-fighting needs.

Q6 **Baroness Crawley:** For our report, in the light of the invasion of Ukraine, we are looking at the increasing threats to the UK that we perceive from Russia. I am particularly interested in maritime security and the threats to subsea cabling around the British Isles and Ireland, for things such as communications, energy supply, and so on. Should we be recalculating the Russian threat to our maritime security as a country?

Shashank Joshi: We have underestimated the threat for a long period. In private, officials understood that there were great vulnerabilities, but there was a hesitance to talk about that publicly for fear of causing concern or even inviting aggression. The war in Ukraine has changed some of that discussion, notably because of the attacks on the Nord Stream pipelines and Baltic cables.

Attribution is extraordinarily difficult in the undersea domain. We still have a patchy and imperfect understanding of who blew up the Nord Stream pipeline. My personal suspicion is that the likeliest hypothesis is that agents of Ukraine probably did it, but we cannot say that with any certainty.

The Baltic cable-cutting episodes from last autumn were widely thought to be the work of Russia, initially. A Chinese ship, the “Newnew Polar Bear”, was also in the region. Many NATO officials thought that Russia was likely to have been responsible. Now, from all my conversations with regional officials in northern Europe, the suspicion is that it was an accident. This many months on, we are still unable to achieve a firm attribution of what caused this damage to cables, and you may have noticed that there have been episodes of cable-cutting in the Red Sea, in the past week. They are very difficult to protect if you cannot attribute even months after the fact.

We are taking the right steps in this direction. There is a new NATO cell for the protection of undersea infrastructure, I think based in MARCOM (Allied Maritime Command) in PJHQ (Permanent Joint Headquarters). In addition, we all realise that states cannot do this without much better ties with the private sector operators of data cables and other infrastructure. Of course, private companies dominate this landscape. In that regard, we have seen some pioneering efforts in Italy, with the Italian state talking to private companies. That seems the right way forward, but we must recognise that we will never have blanket security: pipelines can always be damaged, cables can always be cut. Our response can never be based purely on defence; it also has to be based on attribution, a public response and, if necessary, deterrence of some kind.

Professor Malcolm Chalmers: That is absolutely right. This is something that we look at primarily in terms of attempts by a potential adversary to do something unattributable to irritate and cause problems for us but which is below the threshold of warfare. But there is a question about what level of threat becomes an act of aggression such that, even if nobody is killed or injured directly, it is nevertheless such a blatant threat to our national security that it becomes an Article 5 issue.

Q7 **Lord Alderdice:** Thank you for the evidence thus far. I declare an interest as executive chairman and currently director of the Changing Character of War Centre at Pembroke College, Oxford.

I want to pick up on drones and space. Drones and other unmanned systems are now ubiquitous in the war in Ukraine and are an area of rapid innovation, including on the front line. How transformational have drones, including the inexpensive small drones, been for the way the war is being fought in Ukraine? How far have Iranian drones contributed to the increased sophistication, as well as just numbers, of drones? Following on from this, to what extent are these lessons applicable in the UK context with regard to not only drones but the importance of space for the direction of drone operation and other defence issues?

Shashank Joshi: Drones have been transformational, but we must recognise that this is due to the reasons that Malcolm mentioned: their integration with other forces and reconnaissance. Artillery has been the prime killer in this conflict, and highly successful, because of the ubiquity of reconnaissance drones, allowing gunners to fire on targets with unprecedented precision and responsiveness. The time that a ground

force has between being spotted and being struck has shrunk dramatically from perhaps hours—if a unit does not have its own organic drone capability—to minutes if the opposing force does. This is what has contributed to the “changing character of war”, indeed, the unprecedented jeopardy and sense of lethality on the battlefield.

In a similar way, we have seen so-called first-person view—FPV—drones, which are repurposed racing drones carrying small explosives and often controlled by pilots wearing goggles. These have supplemented the effect of short-range tactical firepower. They have not replaced artillery, and it is important to understand that, for reasons of physics, range limitations, payload limitations and weather constraints, they will not completely replace the suppressive, devastating effects of artillery fire, but they will augment it. Indeed, a weapon that was not even being used at the beginning of Ukraine’s counteroffensive last summer is now being used in substantial volumes on both sides of the war to inflict substantial casualties. It will begin to challenge traditional weapons in some areas under some conditions—I point specifically to anti-tank weapons. A unit once may have used an anti-tank guided missile, but, even if that may be a superior weapon in range and effectiveness, having a cheap FPV drone available to a lower-level unit that would not previously have had an anti-tank capability is changing the level of firepower at its disposal.

We are seeing unprecedented innovation in Ukraine, and we ought to be observing it extremely closely to see what operational lessons we can pull out. But, coming back to the cyber point, we also need to recognise that what we see is not always what is happening. I remember that, in the first weeks of the conflict, we saw Turkish drones—Bayraktar TB2s—being used to great effect. Of course, we now know that, to a degree, the Ukrainians were storing up footage of those strikes and dribbling out the publication of them over a period of weeks to make it look as though these weapons were causing havoc. In fact, these large fixed-wing drones can barely get up in the air now because of jamming and the air defence threat. So if we do not recognise what background conditions are allowing the Ukrainians to use these drones—if we do not study, as a system, how they are overcoming jamming, what is their source of intelligence on Russian electronic warfare so that they know where it is and how to avoid it, and who are the skilled operators controlling not just the drones but the relay or repeater drones that allow the signal to go over the horizon—I worry that Ministers will say, “Let’s buy more shiny drones”, but will fail to invest in all of the enablement that makes this capable and necessary. Please focus on all the stuff that makes it capable.

Professor Malcolm Chalmers: On the economics of drones, there is sometimes a perception that they are a cheap and easy solution. To add to what Shashank said, in a war against a capable opponent who is constantly innovating, as Russia and Ukraine are, you need to invest in a wide range of things to have effective drone capabilities—reconnaissance and electronic warfare—not least in people. You need capable people, who cannot do other things: you need soldiers and others who work with this 24/7. The cost of all of that adds up, and it is one of the directions

we are taking. Technological innovation and looking at the whole drone capability, rather than the cost of individual bits of kit, is really important.

Those bits of kit will become more sophisticated over time because the old ones will not work. The drones they have now will not be operable in six months' time, and that requires a lot of investment in R&D. So it is a complex system, but war is not becoming cheaper because of the existence of these systems.

Lord Alderdice: Is Iran adding to the sophistication, as well as just to the numbers?

Shashank Joshi: As far as I understand it, the Shaheds are relatively crude and unsophisticated drones. I have seen the debris—I have picked up a Shahed and felt it. The selling point is not sophistication, although they are improving in some ways; for example, with acoustic dampening to avoid being picked up by sound sensors on the ground. The selling point is that these are simple, cheap and long-range one-way strike munitions that can be made in large substantial numbers.

I certainly remember asking one US official: who in NATO has a comparable capability at this level on the cost curve for something that can travel 1,200 kilometres, like the Shahed can, and that can carry tens of kilograms of explosive payload? What do we have at a comparable point in the cost curve? The answer is: nothing, because, for understandable reasons, we have invested in higher-end, more penetrating and more effective long-range missiles, but in far smaller numbers. We see the effect of raw mass today.

Q8 **Lord Bruce of Bennachie:** Some of what you say sounds like the beginnings of a world war, in terms of who is being drawn into this conflict in a whole variety of ways, which is concerning. Yesterday, some of us met a Ukrainian Minister, who pointed out to us that, this month, Russia has received 1 million shells from North Korea, and the total supply of shells to Ukraine has been 6,000. That may not be true, but it was the figure she gave us for this month. She said, "We are suffering a much-increased casualty rate". Ukraine already has a high average age of competence, so it does not have the same resilience as Russia to keep filling that gap.

The question for the UK is: what is our defence response to that support? We have a pretty poor record of procurement of highly sophisticated systems that, frankly, do not deliver on time or on budget—that has been revealed by a lot of investigations. Should we switch to things we can produce in quantity fast, given that speed is important now for Ukraine to maintain the line, even as we reorganise our defence capacity in the West? It seems to me that we are now at a critical moment.

Professor Malcolm Chalmers: We are at a critical moment. I will broaden my answer a little because you are asking questions about UK defence priorities that are absolutely germane. One of the dilemmas we in the UK are seeing in relation to defence is that we are trying to do a lot of different things at once—more so than many of our European allies. In

the period from 1990 until 2010 and beyond, we put a lot of resource into expeditionary warfare. We were the leading European contributor in Afghanistan and Iraq, which shaped a lot of the things we are criticising now: the lack of stocks, our emphasis on large drones, and so on. We are now trying to reorient.

Most of our European continental allies—not France—were concerned mainly about Russia, so, when the Russian threat declined in their perception, they did not spend very much. Now, those countries are increasing their defence budgets much more rapidly than we are. The percentage increase in the UK defence budget is less than in almost any other NATO country, but, because we are above the 2%, we escape the level of criticism that others get. The percentage increases in the defence budgets of the Baltic republics, Poland, Romania, the Scandinavian countries and even Germany, which is due to meet 2% this year, are remarkable. All those increases are focused on the Russian threat, not on fighting in the Indo-Pacific, the Middle East, Africa, the south Atlantic or the Caribbean. Over time, that will really make a difference.

Lord Bruce of Bennachie: I agree with you that we have to spend more, but, within our current budget, can we reprioritise in ways that are more relevant to the situation?

Professor Malcolm Chalmers: I think we can, but the easy questions are on where to spend more. The hard questions are on where to spend less.

All this is within the context of alliances. So this is the question for the UK and the Europeans: what alliance do you assume? In particular, do you assume that, in future, we will be deterring Russia with the United States or without it? The American defence budget is under considerable strain from the fact that the Americans are having to deal with three main theatres at once: Chinese military capability continues to grow; they are increasingly being pulled towards focusing on the Indo-Pacific; and they want Europeans to do more. It is not simply a question of numbers; it is not just that we need more tanks, artillery pieces or combat aircraft. We need to think seriously about whether there are capabilities on which we are entirely reliant on the United States for now and which should be prioritised. My argument would be that, given the trajectory of the United States in relation to European security, we are not talking about pulling out of NATO but—

Lord Bruce of Bennachie: It was suggested to us yesterday that the UK was learning quite a lot from its engagement in Ukraine. In fact, the point was made that we are learning better and more than the United States, possibly because we are a bit more detached. Presumably, that can be applied if it is true.

Professor Malcolm Chalmers: It can. Europe will be our priority, even if it is not the Americans', because we live in Europe and this is a much more direct threat to us. But that focusing of effort on making sure that

European security as a whole is robust enough to deter Russia will absolutely be the central priority.

Shashank Joshi: I have one note on your point about high-end systems. We have to reflect on the mix between high-end and low-end. It is about hedging; it is not about switching. If you look at the weapons that have had a devastating effect in Crimea and taken out Russian S-400 air defence batteries, you will see that they are British Storm Shadow and French SCALP cruise missiles. They are expensive, scarce in number and difficult to use. They require extensive targeting support in various ways. But they have been highly successful; indeed, they have contributed to the considerable destruction of the Black Sea fleet and its support infrastructure. A cheap Shahed is not going to do that. It just will not be able to get through the thick air defences, hit those hardened structures and inflict that level of damage. You will always need a stock of high-end missiles for certain tasks and missions; the question to ask is whether that balance is optimal.

The Chair: Lord Wood was going to ask a question but he has had to go to the memorial service. I will come back to it if we have time.

Q9 **Lord Houghton of Richmond:** I want to go back to Lord Robertson's question on escalation. We have heard some opinion that there is more room for escalation left than we are brave enough to occupy, if you like, and that the constraints on Russia's use of tactical nuclear weapons would be informed by China's stated aversion to it; by crossing the nuclear taboo; and, dare I say, by elements of the tactical nuclear firing chain in Russia that may not carry out orders, although that is probably more hope than intelligence. There is a great amount of potential still to escalate without running too much risk on nuclear escalation.

If we want to occupy that space, what are the ways in which we can keep Ukraine in the fight and with the initiative if we are going to lose the attritional battle of industrial generation? I am thinking of the air dimension in particular. It potentially has some F16s of its own; if it trains quickly enough, it could put them in the fight this year. Romania has F16s. The nature of the air dimension could distinctly transform the fortunes of the ground battle. Can you comment, first, on the degree to which you think there is some spare escalation capacity; and, secondly, on where we might be driven to go if it looks as though Ukraine will suffer a humiliating defeat?

Professor Malcolm Chalmers: The story of the past two years has been in large part driven by the concern about escalation. The United States and others—Germany in particular—have been cautious about introducing new capabilities. The UK has been ahead of them at every stage in saying, "We can take more risk". This is not because the UK Government do not worry about escalation; they do. They are clear about this: we put conditions on the weapons systems that we supply about them not being used against Russia itself. So we worry about that but we set the line in a different place. From my point of view, the UK Government are right to balance that risk in a rather more liberal fashion.

Air power is clearly an element in this. We should not underestimate the logistical challenges to Ukraine of maintaining a major fixed-wing aircraft capability because it needs airfields in Ukraine to operate from, which the Russians will seek to target. You need lots of skilled people for that—not only pilots but all the maintenance personnel. But the Ukrainians are losing their own aircraft and they need them replaced. The introduction of F16s will play a useful role; they are not a magic bullet but they can be useful.

The other game-changers include the Taurus from Germany, which would help. Storm Shadow, from the UK and France, is important but there are limits. There are also limits to how far we are prepared to run down our own stocks of that sort of munition; that is a challenge across the alliance. Some smaller countries have been prepared to donate a large proportion of their stockpile to Ukraine because their security relies in any case primarily on being a member of an alliance and having the support of others. However, for larger countries such as the UK, there are real questions around how far you need to maintain your own capability for the possibility that Ukraine will lose.

Shashank Joshi: There are four things that the Ukrainians need. One is manpower. We cannot provide that; they need to mobilise. The second is large-scale ammunition. We can, and must, provide that; it is within our reach. The third is training, in particular formation-level training, which is higher than unit training. We can do that. The fourth is technology, including naval drones—it has been publicly alleged that there is external support for Ukrainian naval drones and that these have been highly effective—and autonomy in the use of some of the UAVs that we have talked about, which may aid last-mile, or last-100 metres, targeting.

Apart from manpower, none of those things seems to me to be an escalation problem. They are all problems of funding, cohesion, policy, and collective action. None of them is an escalation problem. On the escalation bit and F16s, we have crossed that boundary: F16s are coming in. I am really sceptical, I am afraid, about any notion of wonder weapons for Ukraine.

As a former CDS, Lord Houghton, you know that air power is about not planes but a package of capabilities that includes not only the warplane but also the electronic warfare aircraft accompanying it, the refuelling tankers behind it and the air operation centres that orchestrate the operations. Ukraine will have the plane but will it have all these other capabilities and is it capable of utilising them effectively? Officials say that the F16 is seen as a post-war capability, really; that is how they talk about it. They do not have great hopes of it changing the air balance or recovering air superiority and I am highly doubtful that it will.

Taurus is a great weapon. It will supplement dwindling Storm Shadow and SCALP stocks. Germany should provide it, of course; there are some rather niche reasons why it may be constrained, which I would be happy to get into another time. Again, it will not be a game-changer; it will just allow more of what we have seen in deep strikes.

The real debate is the one that we saw erupt in Paris on Monday, when President Macron suggested the introduction of ground troops into Ukraine. He later clarified—belatedly and slightly unhelpfully—that it would be not for combat purposes but for other purposes, including, as French officials said, demining, forward cyber activities, and the maintenance of spares. I believe that these things could help. There is value, as the French say, in preserving strategic ambiguity against Russia and not having closed off options that we ought not to have closed off in the first days of the conflict.

However, again, I view this primarily as a way of giving Ukraine post-war security, not as a way of fundamentally changing its fortunes. For that, I go back to the list of the four things that I mentioned at the outset; they are boring and rather dull but, I am afraid, absolutely necessary.

Q10 **Baroness Fraser of Craigmaddie:** I am interested in what the UK should focus on and which basket we should put our eggs in. It occurs to me to ask: does size matter? We have had General Sir Patrick Sanders talking about needing to increase the size of the Army but, no matter how big it is, does size matter? Are we fixated on 2% spend? Does the percentage matter, or should we be looking at how we spend the money rather than at how much money is spent? On our ties with commercial companies, they need longer-term procurement guarantees in order to ramp up supplies. Are we having the right conversations with our commercial and private partners to enable us, in the longer term, to do what we need to do?

Shashank Joshi: On the size question, there is a way to begin the conversation, which is: do we want the United Kingdom to have a heavy war-fighting division that is capable of meeting its NATO obligations? The answer may be no, but that is not UK policy or NATO expectations at the moment. If the answer is yes, it is difficult to see how the British Army, as presently sized and constituted, will do that within a reasonable timeframe. There are doubts within the Army, among the expert community, including some of Malcolm's colleagues at RUSI, and in NATO itself about our ability to do that, not just in meeting the numbers but in all the capabilities, readiness, training, and stockpiles that go into that.

Right now, the official answer is that we have a plan and, in a decade's time, will have a credible war-fighting division that has all the things that we need in it. We have a timescale problem and a credibility problem, in that I do not believe that those pledges are entirely credible, currently.

Of course, we should not focus on the 2% spend, but it is a necessary but insufficient condition. It is inconceivable that we will meet all our ambitions, even quite basic ones, with anything short of 2%. If you talk to the NATO officials who wrote the NATO defence plans that were approved at the Vilnius NATO summit last year and ask them what the gap is between where we are and where we need to be, their assessment is basically that we are unlikely to meet these plans fully. Of course, they can be fought and defend against Russia, but we are unlikely to meet these plans fully and be able to fight them as written, unless we are

broadly at 3%. That is a very tall order politically, so we have to accept risk.

There is an element of the pandemic to the multiyear contracts. One of the reasons we were caught short in the pandemic was the legacy of previous pandemic fears, when we prepared and stockpiled only to find that things were not as bad as we thought they would be. There was therefore a sense that we had wasted resources in stockpiling things that we did not eventually need. There is the same dynamic at play with things such as ammunition; armies do not really want to invest in it, because it does not do port calls or make a front-page headline for the *Times*. Ammunition is not very sexy, yet it is essential to give you a credible capability. Unless we are willing to engage in multiyear contracts, but accept that we may have large, unused stockpiles in ways that will result in inevitable accusations of waste and profligacy, we will be accepting an unwise level of risk.

Professor Malcolm Chalmers: It was very interesting to read the CDS's speech at Chatham House yesterday and to compare that with Patrick Sanders's speech and his call for a citizen army.² There is perhaps not a clear enough narrative from the Government about our strategic defence priorities. We had a Defence Command Paper refresh last year; unlike previous documents, it was not published alongside a spending review. As a result, it was, in large measure, a wish list of lots of extra things that Ministers and the MoD would like, without any sense of trade-offs. It was not compatible with the defence budget that we actually have this year and next. It was based perhaps on a hope that, one day after the election, the defence budget will increase.

In the absence of a clear sense of priorities, you get two of our most senior military leaders giving a quite different strategic perspective and a sense of the priorities—very different indeed. Sanders made a comparison with 1937 and 1938, and talked about a citizen army and massive mobilisation, as if we were about to face another world war similar to World Wars I and II. The Chief of the Defence Staff focused on Russian weakness, NATO unity, the conventional superiority in numerical terms, and UK naval and air strengths, as a key part of the UK offer to NATO. He still talked about an armoured division for NATO and how that capability can come on stream in a decade.

There is a sense of incompatible narratives. It is clear that, right now, the UK spends about 2.2% of GDP on defence and the Treasury's working assumption is that that proportion will stay constant, more or less; it is not going to fall or increase. If that is the budgetary perspective, we will have to make some much harder strategic choices about the focus of UK defence efforts. We cannot make that choice without thinking about how

² February 2024 speech by Chief of the Defence Staff Admiral Sir Tony Radakin: <https://www.gov.uk/government/speeches/chief-of-the-defence-chatham-house-security-and-defence-conference-2024-keynote-speech>. Coverage of January 2024 speech by General Sir Patrick Sanders, the outgoing Chief of the General Staff (CGS): <https://www.bbc.co.uk/news/uk-68097048>.

we co-operate with our key allies in Europe and the United States. That has to drive where we can best make a contribution in our national interest.

The Chair: Is it too cynical to suggest that one of the differences between the two speakers is that one is in charge of the military and has to present the best possible case and the other is just about to leave?

Professor Malcolm Chalmers: That is entirely possible.

The Chair: Is there anything else that anyone else would like to ask? We have covered what Lord Wood was going to say. If not, I thank you very much for this terrific start to our inquiry, which was broad-based and made some interesting points, as well. We are very grateful. As I said, we will send you a transcript so you can correct any errors of fact. Thank you very much for your time.