

# Joint Committee on the National Security Strategy

## Oral evidence: Undersea cables

Monday 19 May 2025

4.30 pm

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Members present: Matt Western (The Chair); Lord Boateng; Bill Esterson; Baroness Fall; Sir Julian Lewis; Edward Morello; Lord Robathan; Lord Sedwill; Emily Thornberry; Baroness Tyler of Enfield; Lord Watts.

Evidence Session No. 2

Heard in Public

Questions 13 - 22

### Witnesses

**I:** Commodore (Rtd) John Aitken, Underwater System Services General Manager, Thales, and former Deputy Director Submarines, Royal Navy; Captain Niels Markussen, Director, NATO Maritime Centre for Security of Critical Undersea Infrastructure and NATO Shipping Centre.

### Examination of witnesses

Commodore (Rtd) John Aitken and Captain Niels Markussen.

**Q13 The Chair:** Welcome to today's oral evidence session of the Joint Committee on the National Security Strategy. Today is the second evidence session of our inquiry on undersea cables. I start by asking our witnesses to introduce themselves.

**Commodore (Rtd) John Aitken:** I am a retired commodore from the Royal Navy, a submarine captain by trade. My last appointment was as Deputy Director Submarines at Navy Command Headquarters. I currently work for Thales and am a research fellow with RAND Europe.

**Captain Niels Markussen:** I am a Danish citizen and I work for NATO. I am director of the NATO Shipping Centre at the maritime HQ in Northwood. Under the NATO Shipping Centre, we have the newly established NATO Maritime Centre for the Security of Critical Undersea Infrastructure, which I also lead.

**The Chair:** Thank you. We had an evidence session last week—you may

have seen some of that—and, from the evidence we have gained so far, it is easy to conclude that the UK's capabilities are fairly disparate; lots of organisations and different agencies are involved, and so on. Can you give us your view on how well joined up you think the structure of our monitoring of the threat currently is, and where you see any gaps?

**Commodore (Rtd) John Aitken:** It is not particularly joined up at the moment, if I am honest. Efforts are now being made to draw that together, but there is always difficulty in trying to work across government, not out of any intentional stovepiping but out of standard work where it is difficult to get communication across the whole of Government. There are a lot of people doing really good work but doing it in isolation without comprehensive oversight.

**Captain Niels Markussen:** I can speak in general terms for the nations that I know in our alliance. They are not that different from the UK. There is a lack of resources in this area. As John just said, what I find particularly interesting is the lack of work across sectors. Our modern states are very sectorised, and the capability to interact across sectors is missing. Responsibility for the area of communication, IT and so on is typically in different sectors, and then security is also a police or military task, while we have different authorities working in the area, including also the coastguard. When I went to Copenhagen after Nord Stream 2 to find out what was going on, I had to visit six different offices. A lot of the data and the knowledge we need is actually out there but it needs to be shared, and someone needs to have responsibility for the area.

**The Chair:** So there is frustration that agencies and government departments are not joined up, but does it work well between Government, the public sector and the private sector?

**Captain Niels Markussen:** No, that is definitely also an area that we need to look into. I come from a nation where there is not that big a tradition for the public working with industry, but we have to become much better at that. Before, a lot of this infrastructure would typically have been owned by the state. A lot of the big tele companies in Europe were formerly state owned but are now private companies or partly private companies. We need to improve the co-operation between the public and private sectors. There is definitely something to do there.

**Commodore (Rtd) John Aitken:** That is true in the UK as well. I think there is a realisation that there has not been close enough co-operation across industry, academia and government. I was taken by surprise when I found out some of the capabilities that oil and gas had when I was working at Navy Command headquarters. The digital modems they were using for deep diving submersibles for support on their rigs were news to me. As someone who spent my life in submarines, the fact that we did not know about that and had not been talking to the oil and gas industry about it was disappointing.

**The Chair:** Given your naval background, when it comes to the Government's priorities for this and the taskings that the Government

give the Navy, do you think the Government have made subsea infrastructure a real priority?

**Commodore (Rtd) John Aitken:** I think they are starting to, but Niels and I were just talking outside the Committee Room, and we agree that we are behind the curve. Other potential competitor countries have definitely been involved in this for years.

**The Chair:** Why do you think that is? We are an island nation and we have prided ourselves on our Navy over the centuries. Why are we behind France, Estonia or whoever?

**Commodore (Rtd) John Aitken:** People use the lazy phrase "sea blindness", which I am not completely convinced about, but we have become distant from the sea despite being an island nation and completely reliant upon it. I do not think it really resonates with the public or the Government how important it is. There was no appreciation of the fragility and openness to attack of some of the capabilities that support society now, but I think the Government are realising that and are making steps towards it.

We need to be careful about what we say is the Navy's job and what are other people's jobs and where other responsibilities should lie. There is certainly a case for industry and business playing more of a part in supporting their own networks and being aware of where those networks are and the fragility of them.

**Captain Niels Markussen:** I do not think the UK is much more behind the curve than other nations. I see a number of nations as also behind the curve with regard to, for instance, internal or national legislation that hampers their ability to work together, the exchange of information, organisational structures and so on. A lot of things are different.

We have not realised or focused on how important this has grown to be over time; we have simply forgotten that. For a long time we have been fighting distant wars, and security has been put to the back of our mind. We have not really thought about security in this area.

**Commodore (Rtd) John Aitken:** In the 32 years that I was in the Navy, the focus definitely moved away from the North Atlantic and maritime security to wars in Afghanistan and Iraq. I understand why current operations would distract, but in the Navy at that time efficiency was always sought, and quite often efficiency is in conflict with resilience. I hoped that our resilience might become a bit more fashionable after the pandemic, but resilience costs money.

Q14 **The Chair:** Two years ago the Navy launched RFA "Proteus". Is that going to make any difference?

**Commodore (Rtd) John Aitken:** It might. Those sorts of survey vessels can make a difference. It depends on the area that you are searching in. MROS and those sorts of capabilities were based on the idea of taking our ships out into the Pacific, but that is a different operating area from the

North Atlantic. I think the fixed systems that we already have—there is no secret about those—are really useful and deserve further investment.

I get nervous about the current focus on drones and on people thinking that UUVs will be able to act in the same way as UAVs do in Crimea and Ukraine at the moment. The maritime domain, the underwater domain, is completely different from the air domain. Communication and control with an unmanned underwater vehicle are much more difficult than with an airborne or land vehicle. The physics of operating in the water do not change; detection ranges will not massively markedly improve, and you still need significant power in a sensor to be able to detect at range, track and classify, and then communicate back to a base station.

**Lord Robathan:** While we are on RFA “Proteus”, what about the announcement that I have read in the newspaper today about an unmanned submarine that you can pack up and put in a container. What are the issues about that? Can it be controlled from above or not?

**Commodore (Rtd) John Aitken:** They can be sent on certain discreet missions.

**Lord Robathan:** The particular idea was protecting cables.

**Commodore (Rtd) John Aitken:** They can certainly be used to sense around the cable and then come back to the mothership and report, but once any vessel has dived then communication at depth becomes extremely problematic. The sensor fit that you put on to an unmanned vehicle is controlled by the power source that you have on—a battery, in effect—and you need quite a lot of power to be able to detect at range and to classify and track. If you are going to do it on board that unmanned vehicle, you need to compare it to a mission library held on board, do data processing and signal processing, and then detection and tracking. So that is a difficult thing to do, it uses a lot of power, and ranges will be limited owing to the power available to them.

Q15 **Lord Watts:** Do you support a more robust approach to tackling suspicious sub-threshold activity? Does the UK have the strategy in place to bring together the political, military and private sectors in combining to achieve this aim, if that is something you desire?

**Commodore (Rtd) John Aitken:** Do I support it? Yes, but I am not sure that we have all the levers connected. As we said earlier, there is a disconnect between industry, business, government and defence. All of them need to work together to be able to deliver that sort of robust response.

**Lord Watts:** What is the lead department for this? I have been told that it is a surprising department, so I am wondering; I would have thought it was the military, but I am told that that is not the case.

**Commodore (Rtd) John Aitken:** That is a good question, well presented. I do not think that that is the case. I am not 100% certain,

but I think it might be the Department for Digital, Media, Culture and Sport; I am being told that it is.

**Lord Watts:** I do not understand that, so I wondered whether you do.

**Captain Niels Markussen:** This is a good example of how difficult this area is for state structures to handle today. I have two things to add to what John has just said. There is a technological development that we are monitoring closely because there is something going on in that area. For instance, some cables have built-in listening devices and so on, and there are cables that can listen if anything is approaching.

There is also something already going on in the industry. Most of the industry is monitoring its cables out there: it knows what is going on around them and if anything breaks. Cables break all the time; we have around 200 cable breaks a year globally, so they are quite normal. One of the most frequent causes is fishing gear but we even have stories from the Pacific of sharks biting the cables. There is a repair capacity out there that can handle that. So it is important to have a dialogue with the industry that monitors its own cables; if you have that, you might create a better picture of what is actually going on out there.

**Lord Watts:** To be clear: the lead department that should be bringing this together is not the defence team; and, at this point, there is no clear strategy to bring those three partners together.

**Commodore (Rtd) John Aitken:** There definitely needs to be, but I am not sure that it needs to be defence leading it. It depends what you want them to do. Defence will certainly play a part in it, and it might even end up being the prime partner in that effort, but a decision needs to be made about that. It needs to be established across government.

**Captain Niels Markussen:** I can add something on that. From my experience with other nations, I would say that it is about what phase we are in. The bit we are in now is something that we could call the grey zone or the hybrid phase but, to the military, we are in peacetime. The military is not a very good instrument in peacetime in this grey zone. It is a challenge that a lot of nations will have to use the military instrument in peacetime; some thought needs to be given to that.

**Commodore (Rtd) John Aitken:** Attribution is really difficult, is it not? That is one of the things that Niels and I were talking about before. It is really hard to say whether something was deliberate. It could be a shark bite, weather or fishing activity. It could be bad seamanship, when a guy has dropped his anchor by accident then dragged it—although dragging it for 100 kilometres is a bit suspicious, frankly, because you should notice that. It is difficult to attribute that. Then you need police forces or coastguards to be able to intervene, so you have a step before military intervention.

**Captain Niels Markussen:** That is exactly how the states that have seen this now are working. These become criminal cases precisely

because we are in peacetime, so, when something is destroyed, it is a police task.

- Q16 **Lord Sedwill:** I was going to have just one question but I now have two. First, what about international waters, since police jurisdiction does not extend? The second is a NATO question: what about deterrence?

**Captain Niels Markussen:** This area is interesting precisely because of international waters, where the legislation is a little blurry or non-existent, so to speak; that is also why it is interesting for an enemy fighting hybrid warfare. This is an area that we need to look into. It is a big question at the political level in terms of working together on legislation on sea infrastructure in international waters. In territorial waters, it is quite easy because they are covered by national law, but, internationally, we need some legislation and something to use there. International waters tell us that it is not a national issue. We need to work together on it.

The UK is not alone in this. All the cables ending up in the UK come from somewhere and they lead to somewhere, and the cable can be cut in between. That is definitely an area where we need to work together; I guess that is where my organisation and the centre we have built up come into the picture.

**Commodore (Rtd) John Aitken:** NATO is key to that international organisation and international co-operation. It is also worth bearing in mind the difference in operating areas between different areas of international waters. The Baltic is a lot different to the North Atlantic, at a relatively shallow 58 metres, so it is pretty easy for people to have an effect on cables there; you could have all sorts of actors involved in that. In the North Atlantic and around the Mid-Atlantic Ridge, you are looking at 3,000 to 4,000 metres of water. That is not accessible by non-state actors, frankly: it takes a lot of money, research and development to provide capabilities that can affect cables at that sort of depth.

**Lord Sedwill:** Can I pursue my second question, on deterrence? As you say, the military instrument is limited in peacetime. If law enforcement jurisdiction does not really extend beyond territorial waters into international waters, in the absence of international legal frameworks—we are going to ask a separate panel about those later—what is the role of deterrence in this hybrid grey-zone arena?

**Captain Niels Markussen:** The thing that we are trying to unfold now is focusing more on the attribution side, in order to monitor what is going on out there. That should have a deterrent effect. This is what we are doing in the Baltic right now. We are working in the Baltic without any special rules of engagement or anything; we are just monitoring and having a dialogue with the ships out there. As I see it, our being there has had a deterrent effect, so we will see what is done in the area. We think that that is a deterrent.

**Lord Sedwill:** Just to be clear: beyond monitoring and attribution, you

are not aware that there is a NATO policy for a more robust deterrent approach than that.

**Captain Niels Markussen:** The approach is presence and monitoring.

Q17 **Lord Robathan:** Sticking with military capabilities, let us look at command facilities, for instance. Suppose there were to be extensive simultaneous attacks on multiple cables. What particular weaknesses would you see—apart from a lack of capacity, obviously—in our reaction to those attacks? Would military command centres such as MARCOM rely on undersea cables? Would they therefore be in a rather difficult position if someone had cut the cables that led to them?

**Commodore (Rtd) John Aitken:** Yes, they would be in a very difficult position. There is a known fragility around those cables; it is something that is being treated at the moment. There are reversionary systems that would be available but not immediately, and they would offer a reduced capability. If there was a co-ordinated attack against specific cables, there would be a loss of capability that would take hours to restore. There is a reversionary mode available but it would not offer everything that is offered by those cables.

**The Chair:** Do you think that we should know what a co-ordinated attack looks like?

**Commodore (Rtd) John Aitken:** Yes.

**The Chair:** Do you think that it would be preferable not to have that aired publicly but privately, or do you think it is so well known?

**Captain Niels Markussen:** It is important for the state to understand the credibility of its communication infrastructure and to understand how things will develop dynamically if it is hit somehow. With regards to communication—it is the same in the UK—generally, we see a redundancy in the communication side, especially in the central part of Europe, of up to 400% or 500%. So, if we have one cut cable, or two or three, it might not be critical, but being aware of when it is critical is also very important. Right now, I am not sure that any places in Europe are aware of what happens if we are under attack because it is a co-ordinated attack.

**The Chair:** I am sorry—I am going to have to interrupt you there, Captain Markussen, in order to suspend this witness session. We have a vote.

*Sitting suspended.*

**The Chair:** I am sorry for that suspension due to a vote. We will resume where we were.

**Lord Robathan:** I shall tell you what I am particularly interested in; perhaps I may take either or both of you back. As regards the unmanned underwater vehicle and the Royal Navy's ship or submarine—whatever

you like to call it—if one had a lot of cheap underwater vehicles or drones without huge power, because they would not need to communicate, if you had given them a map to where to find the cable, would multiple attacks work? This is what I have been discussing while voting on Baroness Kidron's amendment.

**Commodore (Rtd) John Aitken:** It is still going to be really hard. I know that that is a conditional answer but it is going to be hard because they have to find them. They have to dive to the depth without having control over the thing that you put down—the drone or whatever it is. You then must have enough faith that it is going to find the correct cable and will be able to actuate whatever it is going to do when it gets down there. It is really difficult. It is not the same as flying drones around and being able to launch attacks when you have a line of command and continual control over those drones. People can fly their drone and see what the drone is seeing. You cannot do that with what is available in the undersea domain at the moment.

Q18 **Edward Morello:** Going back to Lord Robathan's original question, in a situation where you have simultaneous attacks on multiple cables targeting a country such as the UK, does that not pass the threshold for becoming a hot war scenario?

**Commodore (Rtd) John Aitken:** First, multiple attacks targeting those specific capabilities are extremely difficult to do. I am not sure how credible it is as a threat. As far as passing the threshold for a hot war, again, it comes back to attribution and being certain that you know who has done it—especially when you are talking about cables in the channel or shallower waters where, as I said earlier, you have multiple actors who can affect that area. It is not like the North Atlantic, where you pretty much know who is involved: if it were the Baltic, the North Sea or the Norwegian Sea, it would be difficult to say for certain who did it.

**Captain Niels Markussen:** To supplement that, you could say that you can attack the UK without touching UK soil, but it is difficult to say where the threshold is. Again, it comes down to attribution, but a co-ordinated attack on four sides of, for instance, the UK, where the cables are cut outside UK territory, could be in international waters. That is very difficult to attribute.

**Lord Hutton of Furness:** On your point about the North Atlantic versus the channel, for example, should we consider places such as the channel and the North Sea safe just because of their proximity?

**Commodore (Rtd) John Aitken:** No. We should not consider them safe because they can be touched or affected by, as I said, multiple actors. You do not need to be a state actor to do that sort of thing. Terrorist organisations could do so if they were able to locate those cables, drive a ship across, drag the anchor, pull up cables and destroy part of the infrastructure there. I do not think that anywhere is particularly safe because you do not need deep-diving submersibles to get down there, either, so you could use capabilities around oil and gas to affect those

sorts of areas as well. We know that Russia certainly has a multiplicity of capabilities in that area around GUGI, which are fairly well reported on.

**Edward Morello:** Captain Markussen, I am interested to know whether, in your view, the UK—unilaterally or as part of NATO—has the capability to outmatch the Russian threat? For example, with Baltic Sentry, which you have referenced already, what lessons can we learn there about the effectiveness of deterrence?

**Captain Niels Markussen:** If we see ourselves as a coherent alliance, we can do a lot—we have a lot of capacity to share between us—but I am not sure that we have enough if they really wanted to harm us and it was done in a co-ordinated way. We also have civilian capacity available for repairs and so on, but it is for the peacetime level of our needs and capacity. We can do a lot. We need to work together. We need to share our capacities. With regards to the pipeline system, for instance, there is common work between a number of commercial players; that is a model that also could be used on the cable side. Working together is of great importance here.

What we have learned from Baltic Sentry most of all, despite all eight nations in that mission being members of NATO, is that that activity has taught us to talk together. We are in NATO. We have a common doctrine and so on; that is a good thing. So we know how to react and can easily work together. This daily communication between the maritime operation centres has been of the utmost importance. We do not normally do that in peacetime. This mission has taught us to talk together. The MARCs are in daily contact. They exchange data and pictures. For a mariner, the picture, as we call it—primarily the surface picture—is very important. That is what we always try to maintain. They exchange that on a daily basis now. It is a big learning point. So communication across sectors, with the exchange of data across boundaries, is so important.

**Edward Morello:** We heard in a previous evidence session about the fact that, although the remit of this inquiry is around subsea cables, the moment when they are underwater is only part of that. Do we recognise or give enough weight to the threat or risk exposure where those cables land—the subsea substations and all those points? Is the risk around that for them equal to what it is for attacks at sea?

**Commodore (Rtd) John Aitken:** It is perhaps not equal risk but there is certainly risk there. It is probably easier to apply security to that because of the environment they are in. Whether there is enough, I would not want to comment on in this forum, but there is certainly risk around the shore nodes for those cables, where they come ashore and in the close area thereafter.

Q19 **Baroness Fall:** You just implied that the industry is acting like we exist in peacetime whereas, in fact, we exist in a turbulent world of grey zone tactics. Focusing particularly on the industry, do you think, therefore, that it exists in a naive state at the moment? Are its preparedness and resilience good enough, or do we need to be changing the way in which

we, as nation states, operate with the industry in order to have it on a more grey zone footing?

**Captain Niels Markussen:** The industry bases its business model on certain risks. Some of the companies out there take a bigger risk—they do not have that much resilience in their systems—but most of the companies are big, robust companies with a certain system that also works in peacetime. It is working always because it is about ensuring that their customers are getting the right service; that is where they make their money. So there is a system in place.

What might work a little against that when working with the industry and having different companies working together is competition. It is about putting themselves in a bad position if they tell too much about how weak their systems are—what is down, what is up and so on. That is an area where we see a little reluctance with the industry in sharing information.

Q20 **Baroness Fall:** Can I come back on your point about risk? Is it your assessment that their idea of the risk that they can put up with commercially is the same as our idea of risk as a nation state looking at the national security?

**Captain Niels Markussen:** They know that there is a risk that the cables will be cut by fishing gear or other things. As I said before, we have around 200 cable cuts a year around the world. You base your model on the fact that that can happen—that there is a certain risk. Then, of course, you calculate. You ask, “How long will it take to repair it? How can I restore the services we provide to our customers?” There is a clear business model for that, which they use. It is, to some extent, the same way we think in the military with regards to risk; we just do not have to earn money.

**Commodore (Rtd) John Aitken:** That is really important. There is reputational risk for those companies, then there is commercial risk as well. If services are stopped, they are losing money—and they cannot afford that, so they are prepared to invest in resilience to insure against it.

In military and defence, with government, it is often harder to get resource supplied when there is a risk that what you are going to try might fail. If you are using novel technologies, there is a risk of failure. There is not a massive appetite—certainly not in the UK—for us to spend money then to turn around and say, “Well, it didn’t work”. People do not appreciate, or do not want to accept, someone saying, “You’ve just applied a scientific method and proved that this bit does not work, so we will do something else”, and working through it like that. There is not an appetite for saying, “A new technology that we tried did not work, so we will stop doing that and move on to something else”. Across government, there is always a fear that you will be castigated in the press for wasting public money.

**Baroness Fall:** You talked about the co-ordination of effort across the Baltics. As we are coming up to the NATO summit this summer, I want to

ask this: do you think that there is a case for NATO potentially copying something like that? Should this be broader?

**Captain Niels Markussen:** Right now, we are maybe a bit too Baltic-focused. It is about seeing this in a broader perspective. I have to be careful not to talk my own organisation down but NATO is only a politico-military organisation, so it is limited with resources there.

We are not that good at looking more broadly at all the instruments of power. You really do have to do that when looking at this because it is so important for the entire society. To some extent, you need to look at a whole-of-governance perspective; NATO might not be the best at doing that. We look at things with military eyes, which are sometimes very limited.

Q21 **Sir Julian Lewis:** When Lord Sedwill questioned you earlier about deterrence, it seemed to me that you were saying that, while Russia and China actively go around cutting cables by dragging anchors, we try to deter them by showing them that we are monitoring them and that we have a dialogue with them, presumably to try to shame them into stopping doing it.

On one notable occasion, we surfaced a submarine alongside one of them; that did give them a bit of a fright. We will be talking to the legal experts next. You are the military people. I want you to consider what could happen if legal constraints were not tying your hands. For example, at least one front-line country—Estonia—is considering directly apprehending these vessels and even impounding them. Can you tell me, from the purely technical side, what you see them doing technically in the next 10 to 15 years? Will it still be mainly them dragging anchors for long distances over the seabed? If that is the case, do you have any thoughts about how that might be countered?

**Commodore (Rtd) John Aitken:** That is a fairly blunt instrument. If they continue to do that, were the legal support there, arresting ships would be appropriate; prosecuting the owner and the master thereof would also be entirely appropriate. However, it is probably not all that they are going to do—I am not sure that it is all they do now—but, bearing in mind the classification, they have spent a lot of money on developing capabilities that would be more subtle in their applicational effect.

**Sir Julian Lewis:** Can you expand on that a little?

**Commodore (Rtd) John Aitken:** We were talking earlier about how, if you were able to interfere with timing signals in cables by altering or affecting the frequency of the electricity passing through the cable, you might be able to cause a degree of confusion in the banking sector or other sectors—that is, if you were able to interfere with the signal rather than just cutting the cable. Cutting the cable is a really blunt thing to do; it is pretty obvious when you have done it. If you can tap or affect the

cable, that is a different matter. The Russians likely have capabilities that may enable that sort of activity.

**Sir Julian Lewis:** Can you think of some countermeasures that we could take? For example, considering the blunt instrument of this very blatant dragging of anchors over long periods and long distances, it rather reminds me of the 1950s when you had sea mines tethered to the seabed. Minesweepers used to go out, locate them and cut the cable, thus forcing the mine to the surface, where it could be destroyed. In this era of remote control, could you consider the development of something like a vehicle with cutters? If a vessel was clearly trying nefariously to cut a cable and would not respond to any of the usual measures of persuasion, could its operation be interfered with by some method of that sort?

It sounds not technically impossible to have something that could sever an anchor cable that was being dragged for hours over long distances, possibly even unattributably, showing that both sides can play that grey zone game. Is it technically feasible?

**Captain Niels Markussen:** I think that it is fantasy to put limits on what is feasible and what is possible with the technological development that we are seeing right now. There are a lot of opportunities there.

As regards attribution, I would focus more on what we can build in relation to warning systems and so on when we construct the cable lines, et cetera. Using fewer cables and other such things gives us an opportunity to be a little in front of the enemy, but we also have other things that we need to focus on. We need to be much better at the surveillance of our seas, especially the cable lines; at using other instruments; and, not least, at connecting all the data that we have.

One of the challenges that we have today is bringing different systems to talk together: having satellite photos, radar pictures and AIS pictures in the same big picture; having systems talking together across boundaries; and exchanging this information. There is a lot of data out there. We just need to systemise the approach to it. We can actually make it very difficult for a potential enemy with the things that we already have now.

**Sir Julian Lewis:** However—this is the final point from me—it is not much use being good at discovering people doing these things if they are blatantly proceeding except when you have something directly happening, such as a submarine surfacing.

**Captain Niels Markussen:** You are right.

**Commodore (Rtd) John Aitken:** I do not think that we need to be cutting anchor cables surreptitiously. I am a submariner by trade. I do not really do passive-aggressive; I do aggressive-aggressive. If you are going to stop these guys, arrest the ship, gas-axe their anchors off then take them into harbour and arrest everybody on board. That is just taking care of business.

It is not a matter of saying that we do not want to have to attribute this. We do want to attribute this: "Yes, we just arrested you. Yes, we knew what you were doing, and yes, we are going to stop you doing it".

**The Chair:** I am sure that we will discuss that in our next session.

**Captain Niels Markussen:** Just to follow up on what John said, that is also what is being done. With the four cases in the Baltic Sea, you can prove that it was these ships that did it, but you cannot prove that they did it on purpose. If they have done it by accident, you still have an opportunity to sue them in the civilian court system. That is what has been done.

**Commodore (Rtd) John Aitken:** It does not matter why, who or when they decided to do that. Arrest them. Gas-axe their anchors off. Take them back alongside. Charge them.

**Captain Niels Markussen:** Be consequent.

**The Chair:** That is clear.

**Lord Watts:** On the same issue, China has the ability for a cyberattack but does not use it; it has that ability in case it is attacked, I suspect. The Russians have identified a weakness in our infrastructure. They are targeting that. Do we have other targets against Russia that we could use as a threat—that is, "If you do this, we can do that"? I am not asking you to identify them; I am just saying that people are thinking about how we could do so.

**Commodore (Rtd) John Aitken:** People are certainly thinking about that but I would not want to go into it, given the classification of this area. Certainly, there is effort and thought given to how you might respond.

Q22 **The Chair:** Finally, I want to ask about repair capabilities. I am interested to see that the US has set up its own sovereign repair capability. We were told in a previous session there are only three or four ships currently out there that can do this. Is that something the UK should be looking at, or—going back to your point about NATO capability, Captain Markussen—how is this co-ordinated across NATO? What are your thoughts?

**Captain Niels Markussen:** We have analysed NATO's capability with regards to repair. We see more than three ships there. It is also in the industry's interest to have sufficient repair capability available. As I said earlier, it happens around 200 times a year, so there is repair capability out there.

It will not be enough if the level of cuts increases. We have to look into that. One of the ways of doing that would be to co-ordinate our efforts with regards to repair capability. As I mentioned, we already see good co-operation in the industry on the pipeline side in the North Sea and northern European area, where repair capability is shared. That would be

the way forward: having a shared capability there. We have, for instance, transport capability within NATO. We have the ARRC projects, where we share lift capability and so on. Maybe some similar construction could be made there.

**Commodore (Rtd) John Aitken:** When you say, "sovereign capability", do you mean government?

**The Chair:** Yes.

**Commodore (Rtd) John Aitken:** This is one of things where we should be inviting the industry to co-operate with government and to have shared assets. Where there is an investment from industry and government, we could insure against that loss of capability. For a while, in the maritime area, in oil and gas, we had sovereign ships for recovering and containing oil spills. We have walked back on those somewhat; there are only two or three of them available now. These things are expensive and this effort is expensive. People are making a lot of money from these cables. They are going to be invited to contribute to their insurance.

**The Chair:** On behalf of the committee, I thank you very much for your time today. We are tight for time so I will not summarise the points that you have made, but this has been very useful. We really appreciate you giving up your time.