

Joint Committee on the National Security Strategy

Oral evidence: Undersea cables

Monday 9 June 2025

5.30 pm

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Members present: Lord Sedwill (The Chair); Dame Karen Bradley; Sarah Champion; Mr Tanmanjeet Singh Dhesi; Baroness Fall; Lord Hutton of Furness; Baroness Kidron; Edward Morello; Lord Robathan; Emily Thornberry; Lord Tunncliffe; Derek Twigg; Lord Watts.

In the absence of Matt Western, Lord Sedwill was called to the Chair.

Evidence Session No. 5

Heard in Public

Questions 47 - 56

Witnesses

I: Mick McGovern, General Manager, Marine Operations, Alcatel Submarine Networks; Alasdair Wilkie, Chairman, Atlantic Cable Maintenance & Repair Agreement; John Wrottesley, Executive Director, European Subsea Cables Association.

Examination of witnesses

Mick McGovern, Alasdair Wilkie and John Wrottesley.

Q47 **The Chair:** Welcome to the second panel of today's session of the Joint Committee on the National Security Strategy looking into undersea cables. We have about 40 minutes, and one or two colleagues need to leave, so we will need to keep questions and answers fairly brisk, please. Can I welcome our second panel of the day? I know that you were in for part of the earlier session, so you now know how it works. May I ask you just to introduce yourselves please? We will start with Mr McGovern.

Mick McGovern: I work for Alcatel Submarine Networks. We are a turnkey provider of submarine cable systems throughout the world. I am based in Greenwich. Within ASN, I am general manager for marine operations, looking after our cable ship fleet both for construction and for

marine maintenance. I have a couple of ships entailed in the Atlantic region that are doing repair work.

The Chair: Thank you. We will hear more about that in a moment.

Alasdair Wilkie: Good afternoon, all. I am chairman of the Atlantic Cable Maintenance & Repair Agreement, among other things. We have three ships based in the Atlantic, one in Portland, UK; one in Brest, France; and one in Curaçao.

John Wrottesley: Good afternoon. I am the executive director of the European Subsea Cables Association. We are an industry group representing telecommunications cables, power cables, and cables for offshore renewables.

The Chair: Again, thank you all for joining us this afternoon. I am going to kick off. We heard that the cable industry is, essentially, optimised for business as usual, commercial issues, and resilience in the normal operating environment. What we are really examining today is the acute question of resilience in a national security crisis of some kind, perhaps if there were a concerted attack. Could each of you give us your view on the security risk to undersea cables as a whole, and whether we should be focusing on accidental damage or whether there is a qualitative difference, were there a concerted effort to disrupt?

John Wrottesley: From the perspective of the industry, we certainly see cable damage and breaks to submarine cables holistically in terms of resilience rather than it just being a security or defence question versus business as usual. There were some reassuring statements in the first session about the resilience of the overall system and the fact that the industry is quite well prepared, through the Atlantic cable maintenance agreement and the private maintenance agreement, to deal with multiple breaks.

In terms of overall resilience, there are other things that impact cables and might impact security, such as permitting or licensing of cable repair and cable installation. There are other things—I do not want to get into too many specifics—that could impact business as usual as well.

Alasdair Wilkie: It is interesting that the cables that we have across the Atlantic and around the UK are very resilient in themselves. I have two repair ships in this part of the world, as has Mick, so there are four ships that can come out. We have only about seven to 10 repairs on cables that access the United Kingdom in any one year, which is quite small for the number of ships that we have. We have to have repairs off the west coast of Africa, as was highlighted last year, but the number of repairs that are going on, certainly in north-west Europe, has gone down, even though the number of kilometres of cable has gone up significantly in the last few years.

The Chair: We will return to this question of capacity against the potential contingencies in a moment.

Mick McGovern: I like to refer to it as cable faults when you have faults of a system, because they can manifest in different ways, be it malicious damage or material damage that is within a repeater itself. The industry is well placed at the moment in terms of being able to cater for business as normal. As Alasdair said, the number of faults affecting our cables is from six to eight.

Moreover, over the last while, there has been a lot of interfacing with government departments to make sure that people—and the right people—are aware of events when they happen within the industry, and how we, as providers of the service for maintenance, et cetera, are well placed to look after it. We co-ordinate that with different groups. For example, my company repaired two of the cable systems up in the Baltic, when there was the problem up there that you all know about. That entailed very close co-operation with the Finnish Government and the Finnish navy, and everything went fine.

It is good now that people are getting more aware of the issues, how we deal with it, and how we work as an organisation and industry, but there is more that we can do. I will leave it at that.

The Chair: Thank you. As I said, we will come on to the question of capacity against the potential threat, particularly if there was a concerted effort of this kind of attack and hybrid. I am going to ask Dame Karen Bradley to lead us into that.

Q48 **Dame Karen Bradley:** Thank you very much. These are probably questions for Mr Wilkie and Mr McGovern, but Mr Wrottesley is welcome to come in. Perhaps we can just start at first principles. How long does it take you to get to the middle of the Atlantic, or wherever the cable may have been damaged? What are the mechanics of it?

Alasdair Wilkie: In the ACMA, we have a number of service level agreements with our ship suppliers. Mobilisation has to be within 24 hours, so the ship leaves port within 24 hours of being notified by the cable owner. She transits at 12 knots. That is roughly the speed that they can do. For any repairs in, let us say, the Irish Sea, they would get there in less than two days, and be repaired in probably five beyond that. In terms of the mid-Atlantic, it is a bit longer to get there, so we are probably talking about seven days to get there and then probably eight to 10 days to do the repair. It is moderately quick. The further the ship has to go, the longer it takes to get there. That is just physics for us.

Dame Karen Bradley: So that is true across the board.

Mick McGovern: If I could add a little bit, when you go into deep water and you go further on out to the mid-Atlantic reach or something like that, it takes longer to do the repair. Moreover, it depends on the time of year that you are out there. If you are into a bad weather window, what should have been a two-week repair could easily end up being four weeks, or maybe more.

Dame Karen Bradley: So a week to four weeks is the window that we

are looking at for each repair. If you had multiple simultaneous cable breaks, how would you co-ordinate the response and which cables would you go to first?

Mick McGovern: We have contracts with our customers. Within the private maintenance agreement, there is a priority in terms of a fault. If it is a traffic-affecting fault, they go to priority 1. It is the first person who rings.

Dame Karen Bradley: What do you mean by “traffic-affecting”?

Mick McGovern: It means that you have lost all transmission on the cable.

Dame Karen Bradley: If it has gone down completely, that would be priority 1.

Mick McGovern: Yes, exactly. If another had a shunt fault or something such as that, you can still carry traffic, because you can power from both ends of the system. It is a way of getting around the problem. If you have multiple faults, nine times out of 10, it will probably be multiple service providers that are linked to that. Alasdair will have a ship. He will probably go out and do one, and I will be doing another.

It could be even more than that. When we had the fault off the Scilly Isles in 2016, there were three cables taken out at one time. We went out and repaired one. We had another one of our construction vessels sitting in Calais, which went out and worked in parallel with the other system. Alasdair had mobilised a ship as well, so there were three ships out there to cater for the faults.

Alasdair Wilkie: I would like to add that, if there were a really large number of repairs in the western approaches or eastern Atlantic, both Mick and I would bring our ships across from the Caribbean as well, if required. We have that facility.

Dame Karen Bradley: How do you decide? You have priority 1 and priority 2, but are there ones where you would say, “This is more critical”? Is there any mechanism that you have for saying, “This is a more critical one?” or is it just the organisation that pays the most money?

Mick McGovern: It is not a question of paying the most money. It is whoever called us out first. Within the agreement, they might speak to the other cable owner and say, “We need to get this one up because of X, Y and Z. Do you guys mind going next?”

Alasdair Wilkie: That is true with my maintenance agreement as well. The cable owners will talk to each other and decide—we have had this done in the past—which order the cables will be repaired in. Normally, as Mick said, a full cable break will be first. Then it might be a strategic cable, particularly out in the Caribbean, between two islands that may have only one cable, so they get done first, and then other cables get

repaired after. It is always a concerted effort between all of them together.

Dame Karen Bradley: We have seen information around how, if it is a single cable to one island, it can be catastrophic for the island, even if it does not look on paper to be as catastrophic as others. How many repair ships are there that are able to do repairs globally?

Alasdair Wilkie: John may be best at answering that one.

John Wrottesley: Off the top of my head, I cannot remember the exact figure, but there are recently published reports that talk about the number of repair ships. On the International Cable Protection Committee website, there is a list of vessels. It is not necessarily totally complete, but it is around 50 to 60.

Dame Karen Bradley: Are they all able to do repairs, not just cable laying?

John Wrottesley: You would have vessels that are capable of doing both installation and repair. They are not necessarily different vessels, but you would have only certain vessels dedicated to cable repair.

Alasdair Wilkie: Any cable ship that can install a cable can repair a cable.

Dame Karen Bradley: Would they move to repair from laying if this became catastrophic? Would it be commercially viable for them to do that?

Mick McGovern: No. There is a large build-out in the construction market right now, and we have dedicated construction vessels that are committed on contracts. It depends on what sort of scenario you are talking about.

The other issue that we have is, for example, down in the Red Sea, where the "Rubymar" took out three cables. That is a high-risk zone. It is a warzone. We are not insured to bring our cable ships there. The provider of maintenance services down there was able to negotiate with whichever side to go and do the repair, but that negotiation took five months before they could do it, and another two months before the three cables were reinstated.

A warzone is different from damage that you have in, for example, the Baltic, where we were quite happy to go and repair cables up there. It is not a declared warzone. If we get into declared warzones, we need some sort of co-operation with government and assistance in that respect. We need to have people trained up to be able to do the work.

John Wrottesley: The Red Sea is a good example of the global ecosystem and the fact that things that happen overseas can have a direct impact in the UK as well. We have talked about how co-ordination on repair in the Red Sea was quite difficult because of the conflict there,

and the risk to ships and personnel. There is very much a difference between business as usual cable repair, which the industry is quite well prepared to deal with, and a conflict situation in which the national capability is not necessarily there to deal with the response.

Dame Karen Bradley: Could you assess how many cables would need to be cut before the rerouting stops working properly? Do you have any formal assessments of this?

Mick McGovern: You would have to be the operator of a cable system to understand the make-up of what is been carried down the cable systems. For example, there were some discussions earlier on about the financial sector. There were specific cables put in, and my colleague sitting beside me was part of it. A transatlantic cable was put in with very low latency, which was specifically for the financial market. There are other cable systems in there that are higher capacity and might carry other information, such as AI and that sort of stuff, but are not necessarily dependent on the financial sector.

Alasdair Wilkie: I agree with Mick. We maintain the cables. We do not operate them. My initial reaction would be that an awful lot of them would have to go down before any change to what happens in the UK is felt. There are the cables through the Channel Tunnel, and they would connect automatically to all the cables that leave from continental western Europe back to the United States. There are more of those cables going in now to western Europe than there are coming into the UK, so it is a slight shift from previously.

Q49 **Derek Twigg:** We understand the issue of cables being severed or partially cut. I do not know the mechanics of this and the technical ability of potential foes around the world to do these things. Is it possible for a potential adversary to send something down there to listen in or take the data away from that cable? Does that cause damage? Is that something that happens? Can they attach something to the cable to take data out of it?

Mick McGovern: We are talking about fibre-optic subsea cables. You would have to have access to the fibre and be able to get data from it. That would be extremely difficult subsea. You would have to cut it. By the time you cut it, someone else knows that something is going on. You would have to be able to terminate it back into equipment, et cetera. I am sure that, at that stage, most of the data going down the cable would have stopped.

Derek Twigg: So you think that that is highly unlikely.

Mick McGovern: That is highly unlikely in my mind.

Q50 **Emily Thornberry:** You told us that there were three cables that were broken or cut in the Scilly Isles at the same time. What would cause three cables to be damaged in that way?

Mick McGovern: A vessel got into trouble and dropped its anchor while it was trying to sort out the problem. It dragged its anchor for a long time around the approaches there, and took all three cables out.

Alasdair Wilkie: I would like to add that it took a power cable out as well, so it was more than just the three telecoms cables that were damaged.

John Wrottesley: One of the interesting things about the Isles of Scilly is that it was reported in the press. The power cable incident was reported because it caused disruption, but the transatlantic cables, which were damaged at the same time, were not reported, because there was not the same level of scrutiny and interest pre Nord Stream as there was following the Nord Stream incident. If the same incident happened now, there probably would be much more scrutiny of that type of situation.

Emily Thornberry: Yes, and it was completely innocent?

John Wrottesley: Yes.

Alasdair Wilkie: Yes.

Emily Thornberry: As far as you are aware, do malign actors know where all the cables are?

John Wrottesley: Cables are charted. We actively promote cable charting because 70% to 80% of cable damage globally is caused by commercial fishing or ships' anchors. Some is caused by natural hazards and other types of incidents. The best defence is to tell people where cables are, so that they can avoid them and avoid damage. There are initiatives to promote cable charting, both regionally and through the UKHO, and we very much promote sharing of that information.

Emily Thornberry: In these days of hybrid warfare, if you have charted where all the cables are and it is open for people to know where they are, that is a time when you might get a concerted attack on a cable network.

John Wrottesley: I am certainly not the expert on discovering the location of that type of infrastructure, but I do not think that the types of charting that we use would be how a potential adversary might find that information. I still think that it is important to share the information to prevent accidental damage occurring.

Mick McGovern: The cables come into diverse sites across the UK. If you have a load of cables taken out at one point down in the south-west approaches, you still have cables coming in elsewhere that you can reroute your traffic through. It is similar to Waze or GPS. If there is a problem on the motorway, it will tell you and reroute you automatically. That is what happens on the submarine cable systems.

Emily Thornberry: The concern that we have is that, as you say, 70% or 80% of the damage at the moment is done accidentally. We are just looking into what would happen if a malign actor was thinking, "This is a

good scheme”, and could do it in an organised fashion. How much could we defend ourselves against that and how much disruption would that cause? If the defensive system that we have at the moment is really against accidents, can it step up to an organised attack?

Mick McGovern: We have to be careful here. A malicious act can be done to a cable system, but it is pretty rare and it would take a long time to take multiple cables out at once, with the diversity of landings. This is why we sit down with DSIT. We have arranged a protocol in terms of issues that come up with the networks. There is an escalation process whereby people know pretty quickly what is happening.

We have other ways of looking at what vessel activities are in the area, such as AIS. We can plot out and see which vessel is there, what is near the cable, and where it is going next. Is it taking a second one out? What is that vessel? Is it a foreign actor or something like that? You can direct resources that we have—if you like, a guard vessel—to go out and divert them.

The Chair: I am conscious that one or two colleagues need to leave fairly shortly, so I am going to bring a couple in, if others can save questions for later.

Q51 **Edward Morello:** You mentioned conversations with DSIT there. You previously mentioned that, in situations where more than one cable has been severed or disrupted, for whatever reason, the cable owners may co-ordinate on prioritising stuff. I am just wondering whether, in your conversations with DSIT, the Government have a role in prioritising which cables should be repaired first.

Alasdair Wilkie: Currently, no, but we would be open to discussing it with the Government, depending on how we can commercially look at that.

Q52 **Baroness Fall:** In relation to the Red Sea, you mentioned that it took a long time to negotiate your way in. You also mentioned that you have a map of where all these cables are. For other warzones, near warzones or complicated zones—for example, the South China Sea—if you have a map and you know where they are, do we need to have a structure in place so that we can have a negotiation and, if something did go wrong, it would not take five months to sort it out?

John Wrottesley: I think so. As I said before, it is a global ecosystem and there is a case for greater diplomacy around the world, and for reaching out to international partners and other countries to make sure that there are plans in place, because what happens in another country can impact domestically as well. We often talk about how, if domestic policy is formed on subsea cables, it needs to have an outward view and to work with other parties too.

The Chair: I want to come on to crisis and tipping points, and perhaps we can follow up on some of those other points.

Q53 Lord Watts: We are trying to look at tolerance thresholds. You have touched on some of the information there, but we are trying to find out what level of attacks, if we had them, you would not be able to cope with at all because there is not the resilience in the system to do that. We also want to know whether there is any spare kit. Is there enough kit for cables and responders? If there were attacks, would civilian ships go out to sea, given the fact that there is potentially a conflict going on and they are civilians?

Alasdair Wilkie: From my perspective, I asked the question of my cable owners how many repairs they could carry out with the current spare quantity that they have. The answer was probably anywhere between 10 and 20 repairs per cable system, so we have far more cable than we need, which is a good sign.

With regard to ships going out into a conflict zone, the answer is probably no. If it is a pure warzone similar to what happened in the Red Sea, without any military assistance, we would not be going out.

Lord Watts: So, if there were attacks, there is not a system in place to replace and protect them at the moment.

Alasdair Wilkie: No, not currently.

Mick McGovern: What you have to remember is that, if it is a foreign actor that has instigated the problem, when you go out with a repair ship, it is a pretty slow operation. You are, basically, stationary for two to three days while you are out there, and that is quite a big target. A lot of thought has to go into how you cope with that at particular times.

John Wrottesley: In terms of a capability to respond to that in a situation that was not business as usual, so a conflict situation, it needs some concerted co-operation between industry and government, defence, or however that would work, to make sure that there is the right skilled personnel, availability of kit, joints, cable and so on, and collaboration with the maintenance agreements, to make sure that there is access to those cables that have been damaged so that that can happen. There are a lot of mechanisms for co-operation now, both within industry, and between industry and government, but a lot more could be done to look at this question of national capabilities in a conflict-type situation.

Lord Watts: Those ships would need protection, so if there is not any co-ordination at the moment that crisis could come very quickly.

The Chair: For the record, for Hansard, they are nodding.

Mick McGovern: The other thing that you should take into consideration is that the spares for these systems are located strategically, at either end of the system, so, if you cannot have access to one depot, you will get access to the other depot that is remote.

Alasdair Wilkie: Transatlantic cable will have a cable depot in the UK or France, and one in the US or Canada.

Q54 Mr Tanmanjeet Singh Dhesi: Let us look into UK sovereign repair capability. I understand that the UK does not have that now. We did have a privately owned UK company, Global Marine, which was bought this year by Singapore. Should we develop our own capability and, if so, how should it be done? The reason why I am asking this particular question is to contrast that with what is happening in the US, which has invested in the cable security fleet. It has that in-house, privately owned, US-flagged capability. The EU, I understand, is looking into some sort of private-public initiative.

John Wrottesley: In terms of national capability, there are still UK-flagged cable ships, not only within the UK but in different areas around the world. In terms of that capability in conflict-type situations, as we have said, it is a global ecosystem and global repair fleet. That is not necessarily a problem in normal times, but, in a conflict-type situation, you would need to look at having skilled, capable people who were trained and able to do cable repair. You could see all sorts of scenario where that could happen.

In terms of the US response, or the investment that it has, that can also be about access to the cables. You have to be able to repair the cables that have been damaged, and that is in co-ordination with the zone agreements that are undertaking the cable repair.

Mr Tanmanjeet Singh Dhesi: Mr Wilkie, should the UK have a sovereign capability?

Alasdair Wilkie: First, I would like to say that two of my ships are UK-flagged, predominantly with UK officers. They use Filipino crew, but they are predominantly UK officers trained by Global Marine. One is in Portland and one in Curaçao. If there is any requirement for a sovereign capability, we would be able to help with the two British ships that we have. They are now owned by a Singaporean company, and were previously owned by an American company for quite a number of years.

Mr Tanmanjeet Singh Dhesi: Mr McGovern, should we have that sovereign capability for cable repair and, if so, how should it be done?

Mick McGovern: First of all, let me say that I work for a French company. The French company owns the ships. We also have a large manufacturing plant in Greenwich, London, which does the repeaters, which are electronics for the system. When the French Government took a major share in ASN, they also sent a memorandum of understanding to the UK Government. It was a clear understanding that the UK part of their business is very important, and it is going to remain within the French Administration, so there is co-operation here. I do not think that we are going to fall out with the French.

Mr Tanmanjeet Singh Dhesi: Fair enough. Let us definitely hope so.

Lord Watts: Not like in the past.

Mick McGovern: Many years ago, though.

Mr Tanmanjeet Singh Dhesi: Thank you for that, Lord Watts. Like you, I would be optimistic, but I take on board Lord Watts's comments.

Mick McGovern: If I could add, the repair and maintenance business in the Atlantic is quite good at this moment in time. It meets the needs of the business, but it is fragile. We, as the ship operators, are propping it up. In other words, we could not afford to run this commercially alone, because we need to do outside work for the ships, and there is not enough longer-term investment in the ships. The sustainability of the fleet needs looking at and investing in.

Mr Tanmanjeet Singh Dhesi: Mr Wrottesley, if we look at some potential options, having read your written evidence, you had some with regards to sovereign repair capability. For the record, what would be a sensible focus? Would it be support with training Navy reservists—and I know that it takes 10 years to train somebody up, but there are capabilities that could be procured within a shorter time span—or perhaps through commissioning new repair shops? If we did go down that route, what could be done, what are the challenges, who should pay, and what would your opinions be on public-private finance to lease repair capacity?

John Wrottesley: Skills and workforce is probably one of the most pressing challenges, so bringing in new skilled people and technical specialists for cable repair and cable activities, who are willing to go offshore. It is not just in terms of training naval reservists, but, more widely across the industry, we are trying to encourage professionals to come in to subsea and see it as a good career to take forward.

In terms of capabilities, if there was co-operation or a public/private partnership, and if naval reservists were the solution, that would have to involve having them integrated into the repair ecosystem, because you do not want to lose those skills and that knowledge over time if people just come and train, and then leave. They have to be part of that ecosystem more widely.

In terms of who pays, I do not know. That is not a question for me necessarily, but there is a lot that can be done there. It is often seen through the lens of being a ship issue. We see lots of initiatives, and the EU recommendation that you referred to talks about buying a fleet of ships. It is not necessarily about ships. That is not the most difficult part of this. It is the people, the skills, and the ability to repair cables that need to be the focus.

Mr Tanmanjeet Singh Dhesi: Mr Wilkie, with regard to commissioning new repair ships, I understand that we have seen a proliferation of cables being laid, but the number of repair ships has not kept pace with that. Do we need to have the commissioning of new repair ships? What do you think about training navy reservists, or any other bright ideas that you or Mr McGovern may have?

Alasdair Wilkie: Repair ships take about three years to build, and the staff to man them about 10 years to train, so there is this dichotomy. We have this delay in getting people trained.

I agree that there are lots more cables going in, but the methodologies, particularly in north-west Europe, of installing and burying the cables, has got so much better over probably the last five to 10 years that the number of faults that we are getting, certainly in this part of the world, has gone down per kilometre.

That is not true in parts of the rest of the world. In the South China Sea and areas like that, the number of faults per kilometre is going up. The number of faults worldwide has stayed about the same for the last 10 to 15 years, and the number of cables has gone from 1 million kilometres to 1.7 million kilometres worldwide, so we have had a very good position on that.

It would be good if we could get some naval reservists on board some of our ships to get trained up and understand, particularly, I would say, the deck officer and the engineering side, rather than the pure cable side, which is far more complicated. Deck officer and engineering officer is a semi-transferable skill. Cable ships are slightly different from ordinary vessels. They do not just go forward quickly. They can move sideways, so they are slightly more complicated to run.

Mick McGovern: We have just put two new ships into the Atlantic region. They are only 10 years old. They are recent conversions. We saw the need for it, we are doing it, and we have dealt with it.

The Chair: Thank you very much. In the last couple of minutes, we want to explore whether we can improve the resilience of the systems themselves.

Q55 **Baroness Fall:** I am mindful of time, but I did want to just come back to resilience and also whether we could improve the protections that we have in place. We have talked a lot about this this afternoon as well, but we have not talked that much about data monitoring, whether we could do more in that sphere, or whether it could be more co-ordinated by Governments or alliances of Governments.

John Wrottesley: In terms of protecting cables, there are very well-established structures of co-operation between industries around the world. The International Cable Protection Committee was established in 1958 as the Cable Damage Committee. It was talking about security, geopolitics, fishing, natural hazards, and all the things that we protect cables from today. Those structures remain very effective. They are good co-operation mechanisms, so Governments can participate. We have regional organisations such as the European Subsea Cables Association, which also collaborates with Government and has government members there in DSIT and DESNZ, as well as the Royal Navy.

In terms of doing more to protect them, some of that co-ordination can be enhanced. It is not to say that the world is perfect, but we can do

more to take less of a fragmented approach. In our written evidence, we talked about supporting cross-government working. That can enhance not just the security discussions, but also some of the challenges that we see in increasing seabed congestion and other things that pose a risk to deployment and repair of submarine cables over the longer term.

Baroness Fall: Just before I turn to the others, that focuses very much on commercial alliances, but it is not so much a national security issue dealt with by other alliances such as the G7 or NATO. Is that a weakness?

John Wrottesley: No, not necessarily. We have been co-ordinating a lot with NATO since the establishment of the CUI network. We have been engaging with NATO and other international partners. The fact that we are the European Subsea Cables Association means that we can work with different countries across the EU and geographic Europe, as well as with NATO.

Alasdair Wilkie: There are certain areas where certainly UK Government can help us. There are issues with predominantly fishermen switching their AIS off to go fishing, and then switching it back on once they have broken the cable. That has caused multiple owners, particularly in the North Sea and the Irish Sea, a real problem. It is not managed; it is not co-ordinated by anybody. They just do it. In a recent TV programme, a fisherman admitted to doing it.

The other issue that we have is that it is not just the UK end of the cable that matters, but what happens at the far end. As John said earlier, the permitting regimes that exist in those other countries sometimes delay repairs significantly. Canada can take weeks to organise a repair. Spain and Portugal are very slow now as well, even though they want to say that they are quick. The UK is very good. The other end of the cable can take just as long to repair, if not longer, which causes us issues, because the traffic does not work at all on the cable.

We need to have more involvement with government. Through the International Cable Protection Committee and ESCA, John is doing a very good job at getting that government liaison working and bringing the Government in to understand the issues that we have in the submarine cable business.

Baroness Fall: If you think that there could be a malicious actor there, is the monitoring in that sort of emergency situation working as well as it should?

John Wrottesley: If we are talking about grey zone-type incidents that could be suspicious but might be less attributable, the impact for industry is much the same. If a cable is damaged, the importance is to minimise disruption and respond to repair it. Whether it is a grey zone-type tactic or a typical cable break, by reducing the number of overall cable faults worldwide, you can make those incidents that do happen and require more scrutiny easier to scrutinise effectively.

Mick McGovern: There are a couple of things that can be done. One is the build-out of new systems. We could be looking at a lot more routes through which you could access the UK, which are currently being locked by other sectors. What I mean by that is that, if you have an easy process to get a permit to put a cable in through there, you are sharing it with someone else and routing traffic away from another heat point, if you like, so you have that resilience.

The industry has developed a new technology called distributed acoustic sensing, which can characterise if there is anything happening on the sea floor close to your cables, so that you know if there is something coming up. If you have that in multiple areas and landing points, if there is something running down the coast, you will know, "Yes, we have a problem coming here", and the warning signs can go out.

Q56 **Lord Tunncliffe:** I have a very simple question. What does a modern north Atlantic cable cost? I need a figure: how many noughts?

Mick McGovern: A transatlantic cable, point to point, could cost between \$300 million and \$400 million.

Mr Tanmanjeet Singh Dhesi: Lord Tunncliffe will be out shopping.

The Chair: Thank you all very much. There was a lot of material in that panel. Certainly what I have heard from it is that we have good capability to deal with the problems of normal pressures, but that it would be extremely challenging were we to face a major confrontation. One thing that certainly I heard for the first time today is just how long it would take to scale up to deal with the kinds of threats that we might face, and that is one of the things that we will have to reflect on as a committee. With that, can I thank our second panel? Apologies for overrunning by a few minutes. Thanks for joining us. We will conclude today's session there.