



OFFICIAL REPORT
AITHISG OIFIGEIL

Rural Affairs and Islands Committee

Wednesday 24 April 2024

Session 6



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RURAL AFFAIRS AND ISLANDS COMMITTEE
10th Meeting 2024, Session 6

CONVENER

*Finlay Carson (Galloway and West Dumfries) (Con)

DEPUTY CONVENER

*Beatrice Wishart (Shetland Islands) (LD)

COMMITTEE MEMBERS

Alasdair Allan (Na h-Eileanan an Iar) (SNP)
*Ariane Burgess (Highlands and Islands) (Green)
*Kate Forbes (Skye, Lochaber and Badenoch) (SNP)
*Rhoda Grant (Highlands and Islands) (Lab)
*Rachael Hamilton (Ettrick, Roxburgh and Berwickshire) (Con)
*Emma Harper (South Scotland) (SNP)
*Elena Whitham (Carrick, Cumnock and Doon Valley) (SNP)

*attended

THE FOLLOWING ALSO PARTICIPATED:

Karen Adam (Banffshire and Buchan Coast) (SNP) (Committee Substitute)
Ian Gatt (Scottish Pelagic Fishermen's Association)
Elspeth Macdonald (Scottish Fishermen's Federation)
Helen McLachlan (Future Fisheries Alliance)
Joe Whitelegg (Isle of Man Fisheries)

CLERK TO THE COMMITTEE

Emma Johnston

LOCATION

The Mary Fairfax Somerville Room (CR2)

Scottish Parliament

Rural Affairs and Islands Committee

Wednesday 24 April 2024

[The Convener opened the meeting at 09:05]

Subordinate Legislation

Sea Fisheries (Remote Electronic Monitoring and Regulation of Scallop Fishing) (Scotland) Regulations 2024 [Draft]

The Convener (Finlay Carson): Good morning, and welcome to the 10th meeting in 2024 of the Rural Affairs and Islands Committee. We have received apologies from Alasdair Allan MSP, and we welcome back to the committee Karen Adam MSP, who will be attending as a committee substitute. Before we begin, I remind everyone who is using electronic devices to please switch them to silent.

We begin with an evidence session on the Sea Fisheries (Remote Electronic Monitoring and Regulation of Scallop Fishing) (Scotland) Regulations 2024, for which we have approximately 90 minutes.

I welcome to the meeting Elspeth Macdonald, who is the chief executive of the Scottish Fishermen's Federation, and Helen McLachlan, who is the head of marine policy at RSPB Scotland and who is giving evidence on behalf of the future fisheries alliance. Joining us remotely is Ian Gatt, who is the chief executive of the Scottish Pelagic Fishermen's Association, and Joe Whitelegg, who is the fisheries control and enforcement manager for Isle of Man Fisheries. Thank you very much for joining us this morning.

I will kick off with a straightforward question. Do you believe that there is a need to introduce mandatory remote electronic monitoring? Is it clear what the benefits are and how REM could improve fisheries management in Scotland?

I ask Elspeth Macdonald to kick off.

Elspeth Macdonald (Scottish Fishermen's Federation): Good morning. The Scottish Government has been developing this policy for a number of years now. There have been discussions with industry and other stakeholders over a fairly protracted period, but we are still at a stage where the costs of mandatory REM, certainly, are becoming clearer but the benefits are perhaps less clear and less able to be

articulated in relation to when they might be delivered and what they might cost to be delivered.

We can probably see some scope for benefits. There is scope for REM to develop a more granular evidence base around where and how we fish, which might be helpful in the context of marine spatial planning, for example. We know that there is increasing pressure for space for use in our seas, which we have spoken about a lot, here and elsewhere.

However, we have to be realistic and honest about the fact that having cameras aboard vessels is a matter of compliance, and it is the stick rather than the carrot. It is important that we all understand that REM is a tool, not a solution in its own right. We really need to have practical and achievable policies in place. If we do not have those in place before we put REM in, we are rather putting the cart before the horse.

We can see the scope for some benefits from it, but we are concerned that it is, as I said, also very much about putting a compliance tool in place while we are still very much developing a new suite of fisheries management policies in Scotland.

The Convener: The federation represents some scallop fishers. Currently, some of them will voluntarily have REM on their vessels. What was the reason for their voluntarily doing that? Have they seen any benefits, or what issues have they seen?

Elspeth Macdonald: They could see that a mandatory approach was coming. That was evident from the Government's policy discussions over a number of years. There was the possibility for the scallop fleet to have grant-funded assistance to put REM aboard, and a majority of them went down that road. They probably feel that it can help to prove where they have and have not been fishing, but there have been quite a number of technical issues with its reliability and with knowing whether it is working on a particular day. That is less of a problem when something is voluntary, but it is more significant when it is mandatory.

I also think that the scallop fishers feel that the system's ability to deliver benefits is not clearly articulated or costed. It might mean that it is possible to deliver some of the benefits that the Government has set out, but there is no way of knowing how long that would take or how much it would cost to do that.

Helen McLachlan (Future Fisheries Alliance): I will take a step back to a little bit of the evolution of REM. The introduction of the landing obligation under the 2013 common fisheries policy, which basically obliged fishers to land what was caught, was in response to concerns about the large

amount of discarding that was going on across European waters—25 per cent of what was being taken out of the water was being discarded. The impetus was to improve selectivity and incentivise better management at sea, but, of course, if a regulation requires stopping an activity at sea, you need to be able to have eyes on whether it is being complied with. Since then, the European Fisheries Control Agency has clearly said that there has been low compliance, and it has encouraged member states and coastal states to introduce REM as the most robust and cost-effective means of monitoring that compliance.

However, this is not just about the target stocks; it is also about the impact that fishing is having across the wider marine environment. We have 15 indicators of ocean health, but only four of them are green, so we are not doing a good job for our seas at the moment. Fisheries are recognised as having one of the biggest impacts on marine biodiversity. It is clear that we need to make sure that we are doing the best job in relation to how and where we fish and that we are minimising the impact of that.

Remote electronic monitoring with cameras and sensors will not only offer us an understanding that we are complying with what legislation there is but let us understand better the impact on our marine environment. For example, hundreds of thousands of marine mammals, seabirds and elasmobranchs—sharks, rays and skates—are caught incidentally each year in our waters and we have very little understanding of the true extent of that. Having cameras on vessels will allow us to improve that understanding. Supply chain confidence and greater trust in the management system will all be improved by having the suite of data that we will be able to provide.

We have certainly had cases in which fishermen have said that they think that something is going on and they have been able to evidence that with cameras. It is about co-management, improving trust and transparency in the supply chain and giving consumers greater confidence that, when they buy Scottish fish, there is a high degree of confidence in sustainability. We see those things as the benefit.

REM is also not something that we are doing just here. It is a tried and tested management tool that is being used mandatorily in a number of countries across the world, to very good effect.

The Convener: We move to Joe Whitelegg, from the Isle of Man—welcome, Joe. I can look across the sea and see the Isle of Man on most mornings, because the sun always shines on Dumfries and Galloway. I feel like you are a very close neighbour to me, down in Kirkcudbright.

What is your perspective on how REM is working in the Isle of Man?

09:15

Joe Whitelegg (Isle of Man Fisheries): We do not have REM fitted on any of our vessels yet, but we wholly support the Scottish Government's approach to REM. The Isle of Man has been heavily involved in working groups on putting REM on vessels and creating the Scottish statutory instrument. We are not far behind you, to be honest. We have a number of vessels that fish in Scotland for the summer, so they will need REM. We are currently consulting with suppliers for REM, and we are fully behind it. We think that it is good—it is another enforcement tool as part of the arsenal.

The Convener: Perhaps you can clarify something, as I may have misunderstood. Is it your understanding that Manx vessels will require REM to fish in Scottish waters?

Joe Whitelegg: Yes, from June. We are actively working to make that happen.

The Convener: Okay—that is grand.

We are now joined by Ian Gatt, who is also out of the country, although slightly further away than the Isle of Man. Welcome, Ian.

Ian Gatt (Scottish Pelagic Fishermen's Association): Good morning from Barcelona, convener. I am here attending the Seafood Expo Global. I recommend that the committee attend it at some point, as it will give you a wider perspective on what is going on in the world. It is absolutely staggering. I am here to help our pelagic processors with engagement.

With regard to REM, the policy—as Elspeth Macdonald said—has been developed over many years. From our perspective, however, it is probably another unnecessary layer of control. We have a really good control system in place. The compliance officers know where each vessel is at any time and they can see whether a vessel is steaming or hauling. Then, when the vessels land, all the landings are inspected.

REM will be an additional cost to the fleet, and we do not see the benefits from it. It will also be a huge cost to Government. The marine budget is extremely tight as it is, and something has to give. For instance, we see issues around the production of science being sacrificed as a result of what is going on with budgetary cuts, yet it has been a Government choice to put in an additional layer of control.

Convener, you asked the question yourself: what is the issue? Is there no confidence in the pelagic fleet? Are the stocks in a bad shape? We

know that they are not—all the stocks are at, or above, the levels recommended by the science. That raises the question of why so much effort and money are being put towards this particular policy when control is not a big issue.

The Government is selling REM as a great thing for the scientific benefits. We employ a scientist, and we cannot see what additional information they are going to get through the policy. Helen McLachlan mentioned that the markets are asking for it. I deal with the market—Scottish processors and domestic and external retailers—daily, and we have meetings with various retailers and people in the supply chain probably every fortnight. Never once has any of them come to me and said, “We would really like you to have REM.” The concern in the pelagic industry is about whether we can get quota-sharing agreements across coastal states in the north-east Atlantic. That, not REM, is the concern.

Emma Harper (South Scotland) (SNP): Good morning, and thanks for being here. I have a couple of quick questions about the technical specifications of remote electronic monitoring systems. Some stakeholders responded to the committee’s call for evidence by saying that there is a lack of clarity around the technical specifications. I am interested in hearing whether witnesses are clear about what equipment is required and whether there is enough information about the tech specifications for remote electronic monitoring systems.

Elsbeth Macdonald: Not as far as I can see. The SSI and the business and regulatory impact assessment that supports it talk about the different technologies that will be required for an REM system—the positioning system, wind sensors and cameras—but it does not go into any technical detail.

The SSI mentions that ministers may wish to change the technical specifications from time to time, but it is very vague. It is not clear on how frequently ministers might wish to change the technical specifications, and—certainly based on what I have seen—it does not appear that there is any scope for scrutiny of the technical specifications or any obligation to consult on what they might be. There is no clear link in the SSI in terms of how often the technical specifications might change, and the people in the industry who will be required to put REM in place, pay for it and have their activities monitored through it do not have any opportunity to have a say on that unless there are going to be informal policy discussions about it. There does not appear to be any legal obligation for consultation on that or for scrutiny of it, for members or for us.

A moment ago, Joe Whitelegg mentioned that putting REM in place in the Isle of Man fleet is

being considered, and Helen McLachlan alluded to things that might happen in the EU. If the policy becomes more widespread, there are issues with how businesses will need to work within specifications that diverge, if they are not the same, and how we deal with obsolescence. A number of detailed technical issues need a lot of further consideration.

Emma Harper: I am not sure whether the other members want to come in on that. You said that the SSI says that ministers can change technical specifications. Would that be because the technology might evolve to be improved—for example with improved cameras? We are learning from Canada, New Zealand and the United States, which all have REM technology already. The SSI would allow technological specifications to be changed, basically.

Elsbeth Macdonald: Yes. The SSI says that ministers may change them from time to time, but it does not set the criteria under which those changes might be required. They could be changed because of improved technology or because the current specification does not work very well. However, it gives ministers very open-ended grounds on which to change the technological specifications, as far as I can see.

The Convener: Rachael Hamilton has a supplementary question.

Rachael Hamilton (Ettrick, Roxburgh and Berwickshire) (Con): My question is about something that Ian Gatt said in his consultation submission. He said that pelagic boats already have cameras installed. How would the people who already have those cameras installed meet the guidelines that the Government is setting? Would it be like for like?

Ian Gatt: That is a very good question, Rachael. It is unclear at the moment. As I put in my written submission, there are a lot of cameras in pelagic vessels in all the critical areas—probably those that the Government would like to see covered. The specification talks about frame speeds and so on, and I am unclear whether the cameras that are there would fit the specification. The short answer is that we do not know.

In relation to the specification, I agree with Elsbeth Macdonald. It is disappointing that, for instance, the committee cannot scrutinise the technical specification. That will be left to the Government, and who knows where that will go over time.

One of the key things that we do not know at the moment is how many suppliers will be able to provide the equipment that we do not already have—the wind sensors, the black box and so on—and how many engineers will be available to install and then maintain the systems.

One of the key criteria—and something that is extremely concerning for us—is that, after a second trip on which there is a malfunction in the equipment, the vessel has to stop fishing. As you all know, the pelagic seasons can be very short—just a matter of weeks. I am really concerned that a vessel could be tied up in port and unable to get the system functioning again while the fishing season passes it by and it is not able to fulfil its quota. That is a genuine concern, and we have no knowledge about how that will be handled. Instead of saying that a vessel has to tie up after the second trip, an alternate solution could be that we need to report more frequently. It would be a really sad situation to have a vessel unable to catch its quota because it cannot get its equipment functioning.

Elspeth mentioned that the scallop industry has encountered problems with its equipment. That would need further scrutiny by the committee.

The Convener: You talked about the maximum frame rates that the cameras could capture. I know that the tech spec suggests that there should be a minimum of 2 megapixels per frame and a minimum horizontal resolution of 1,920 pixels per frame, as well as infrared capability and a minimum ingress protection rating of IP66. Are you confident that those specifications are sufficient to comply with the legal and policy aims of the Government? Does the REM that is currently on scallop boats comply just now, or are we looking at a whole new REM system being installed on the scallop fleet?

Ian Gatt: I could not answer in relation to the scallop fleet. My short answer is that I do not know whether the cameras that are currently on board the pelagic vessels will comply with the requirements. I sincerely hope that they do, because, as I said, there are a lot of cameras already on board. If we could at least use the ones that are there and fulfil the policy objectives, that would be a huge help.

The Convener: Elspeth Macdonald, could you touch on the scallop boats?

Elspeth Macdonald: It is not my understanding that the scallop vessels that already have REM will have to change that system. I think that that is reflected in the coming into force date for the scallop vessels, which is clearly much sooner than that for the pelagic vessels, which do not have the system. That is therefore not my understanding.

However, as I said a moment ago, and as Ian repeated, one of the concerns of the scallop fleet is that, when the technology fails—as it sometimes does; it is not an uncommon issue—you are completely at the mercy of somebody coming to fix it.

In relation to winch sensors, I believe that the intention is that the vessels will be able to use a simplified winch sensor that the crew should be able to fix themselves. However, in relation to the other equipment, they will be reliant on technicians and engineers being available and able to come and fix it. As Ian said, when there is a ticking clock in relation to your fishing season and you are at the mercy of other parties coming to fix your equipment, that causes real concerns for the industry.

The Convener: I am aware that Rachael Hamilton and I interrupted Emma Harper's question, so I ask Joe Whitelegg whether the Isle of Man marine compliance has any issues with the technical specification. Have you any reason to believe that the technical spec could give rise to issues?

09:30

Joe Whitelegg: I have been asked to highlight the fact that the specifications are still quite vague. Obviously, changes can be made to ensure that you can back up the changes, in effect, so we have the same concerns as the parties who spoke previously.

Helen McLachlan: I probably do not have a lot to add to that. I know from the experience of other countries in which REM has been applied that good governance is about getting the specification right. The flexibility that was allowed by not being required to come back constantly to make what might be minor adjustments is quite good, because you might want to deal with the application differently, depending on your management objectives. That is obviously something for officials to consider.

Beatrice Wishart (Shetland Islands) (LD): In some ways, Ian Gatt and Elspeth Macdonald have already answered the questions that I was going to ask about the reliability of the system and getting repairs. In response to the committee's call for views, we heard from industry stakeholders about the availability of marine electronic companies and engineers. What are your thoughts about the 28-day grace period for scallop vessels and how that impacts on the rural and island areas where most of those vessels are fishing from?

Elspeth Macdonald: If I read the SSI correctly, the 28-day period seems to apply only to the wind sensor element of the system. Of course, there are three elements, the others being the cameras and the positioning system.

As I said a moment ago, it is our understanding that, under the provisions, the wind sensor that can be used can be fixed by the vessels themselves, so they might be less dependent on an engineer coming to do that. If that is the case,

there will be less reliance on a third party coming to do it, assuming that the vessel has access to the piece of kit that is required.

For the other elements of the system, as Ian Gatt described, there are some pretty stringent rules around what happens after the first breakdown and what then happens after the second breakdown. The scallop fleet is clearly less constrained than the pelagic fleet, which has a very tight seasonal fishery. Nonetheless, these are businesses and, as the BRIA sets out, the profitability of the scallop fleet is pretty low. Any time lost while a vessel is unable to fish because it is awaiting repairs will cut into that already pretty small profitability and has the scope to affect the viability of some vessels.

The Convener: Ian Gatt, would you like to come in on the same point?

Ian Gatt: It is not something that I have studied, convener, because it is largely applicable to the scallop sector.

The Convener: Okay. I have a supplementary question. Some of the suggested mitigating solutions include vessels being required to maintain a minimum speed, which would reflect the fact that they are not fishing, and their being required to stay a certain distance from closed fishing areas. Do we need such measures in the SSI in order for it to be fit for purpose to deal with the issue of downtime?

Elsbeth Macdonald: At this point, without much practical experience of how things are working, it is hard to say. The experience thus far is that those vessels in which an REM system has been put in place voluntarily have had issues of reliability and of things breaking down. They have had to deal with that, but they have been able to do so in their way and without the full force of the law sitting over and above the system's use.

What we really need is a hefty dose of pragmatism and practical solution finding and problem solving between Government and the industry. I do not know whether it would be possible to list every mitigation that you might put in place in order to help somebody to continue to fish while a system was being repaired if there were factors beyond their control. I do not know whether you could necessarily list all those mitigations in the SSI, but there needs to be an absolute willingness to be pragmatic and practical about finding ways—

The Convener: Does the instrument on which we will have to make a decision allow for that pragmatism?

Elsbeth Macdonald: I think that it might, because the SSI enables ministers to set conditions. It does not specify what those are, but

that seems to signify that officials will have the capacity to apply a degree of pragmatism.

Rhoda Grant (Highlands and Islands) (Lab): Some of your members have already fitted and are working with REM systems. How often do those systems become faulty and how long does it take to fix them?

Elsbeth Macdonald: I do not know how often the systems become faulty, but I have heard of examples of their having taken weeks, not days or hours, to be fixed. Those might be outliers. I do not have a comprehensive list of issues, but examples have been raised with me in which people have waited weeks for technicians to come to fix the kit.

Rhoda Grant: Would it be helpful, then, if the Government were to specify what system can be used, so that technicians or, indeed, replacement parts could be made available at ports? That would allow fishers to slot in something else when they have to send the system away to be fixed. It seems to me that there is an opportunity for the Government, a co-op or an association such as yours to say to fishers that technicians and parts will be guaranteed if everyone uses the same REM system. Is that a solution?

Elsbeth Macdonald: Possibly, but how the market works is an issue. Another issue is whether the Government would consider it appropriate to dictate that only one system could be used. I think that it wants those on vessels to choose the system that they wish to use, as long as it is compliant with the requirements. However, that means that different systems would be in use, and different companies might provide one system and not another.

I guess that it is a question of what the market will do. I see logic in what you are suggesting, but I just do not know how easy it would be to get everybody to agree on one system. Take Ian Gatt's pelagic fleet. As he said, there is a huge amount of technology already on those vessels, and they might want to buy particular kit because it will fit in more easily with their existing technology. We will have to see how the market shakes out, I suppose.

Karen Adam (Banffshire and Buchan Coast) (SNP): Under the instrument, Scottish ministers will be able to serve a data transmission request notice. What is your understanding of what that means, and do you have any thoughts on that?

Ian Gatt: That is a very interesting issue. We know that, if a request comes in, we need to supply the data within five days. We would like the committee to ask the minister, when she comes before you, what circumstances would trigger the request for the REM data. It is not very clear in either the SSI or the technical specification what

the requirements would be. That is certainly something that the committee should be trying to dig into.

Karen Adam: That is helpful.

Elsbeth Macdonald: I agree. I do not have anything to add. It would be helpful to understand that better.

Rachael Hamilton: My question is supplementary to Karen Adam's question on data transmission request notices. It appears that a number of Scottish vessels have been giving data to Marine Scotland already. How is that data being used? Do you see that data? Is the science for compliance or for opportunity for fishermen to, for example, ensure that they have the right quotas? I am unsure about what that data does and whether there will be the necessary resource to ensure that the data that has been requested is used effectively.

Elsbeth Macdonald: That question gets to the crux of a lot of this issue, which is about what benefits might flow from the process. A great deal has been set out in the policy discussion around how we have got to where we are today—it has been set out again in the BRIA—and the potential benefits. However, with regard to improved science, those benefits are potential. I am not aware of any beneficial scientific impacts being generated by the data that has been requested from the part of the fleet that already has the system.

What it probably has been able to do is provide an assurance to the Government and the compliance team about where vessels are fishing, what they have been doing and what gear they have been using, but I am not aware that that has provided any scientific benefit or anything that the industry would see as having a beneficial purpose. That is perhaps one of the frustrations that is felt by those operating some of the vessels that already have the system—that it is all stick and no carrot.

Ian Gatt: The point about the scientific benefits is interesting. What we see in the system, in relation to providing information, is actually just the process of verifying information that we are already giving. I will try to give you a flavour of it. As I said, the association employs a scientist and we are on a programme, in conjunction with the Government, that is a self-sampling and co-sampling project in relation to data. That means that every pelagic vessel takes samples of a catch—of every haul—so we are already providing that information.

As part of the REM, we are being requested to put a camera above the person who is measuring the fish and providing that information. So, I do not see that it provides anything additional to what we

are already doing. We are already providing length and weight information for every haul, and I do not see that the process adds anything at this stage. Whether it will develop into something, I do not know, but there is nothing new or innovative there.

09:45

Helen McLachlan: With REM, you are collecting an enormous amount of data. You are not always reviewing that enormous amount of data, but it is there. You can go back to scrutinise it for different policy or scientific objectives—for example, if you want to look at the mix of any haul. With regard to a pelagic fishery, Ian Gatt will be able to tell you much better than I can how high the percentages are—what the target is and what the percentage is. There might be other species in the haul, and the monitoring will give us an understanding of when that occurs. We also need to have confidence in the levels of potential slippage or discarding in any operation across our fleets.

As I said, we have very little understanding of the impact of a lot of our vessels on non-target species such as seabirds, marine mammals and so on, and the process will help to build a bank of evidence, whether it is positive or negative. If we can demonstrate that there is no problem, that is great—we will be able to provide evidence of that. That is what the cameras in the system will allow us to do. The global positioning system gives you the location, the winch will give you an indication of when fishing activity is occurring, and the cameras will look at the mix that is coming up in the haul. The process provides that additional evidence.

Rachael Hamilton: So, is it really science for compliance? You said that you need to have confidence in the sector. Is that because you do not trust the sector and you want to see what it is doing—a bit like Big Brother—or is it because, as you said in your introduction, you want to see the data in order to improve some of the targets that you say are not being achieved in the marine environment? If so, how do you do that, and does Marine Scotland have the resource to do that? Is it science for compliance or science for opportunity?

Helen McLachlan: I think that it is a bit of both. We need to have confidence across the board in our fishing fleet and the impacts that it is having not just on the target species but on the non-target species. Yes, as you say, Scotland could be a potential leader. We talk about sustainable fisheries, and this evidence would allow us to say, "Look—we can demonstrate that we are fishing in a sustainable manner. Our impacts on the stock are X and our impacts on non-target species are Y." However, the impacts on non-target species are something that we really have very little data

on. This process will give us a much better understanding across fleets of exactly what those impacts are, which is really important. It is also relatively low cost in comparison to—

Rachael Hamilton: I am sorry to push you on that, but can you cite some of the studies that have been done—current studies on Scottish vessels—to identify that non-target species have been taken from the waters?

Helen McLachlan: At the minute, less than 3 per cent of fishing activity has been monitored at sea for non-target bycatch. It is a difficult thing to do, because that monitoring is undertaken mostly by human observers going on vessels, which is a very time-consuming and costly process. Observers are a scarce resource, and having cameras on vessels will allow you to have eyes on 100 per cent of what is happening at sea. For sensitive species bycatch, it is mostly at the time of hauling that you would be able to see whether something else was coming up in the haul—whether it was getting caught in the warps or in the catch itself. The camera footage, in conjunction with the winch footage, because the winches would indicate that it had been holding—

Rachael Hamilton: But those vessels have had REM.

Helen McLachlan: They have not had REM for the purpose of looking at non-target species, to allow any scrutiny of it for purposes of impact—

Rachael Hamilton: But what is the point? It is not your fault, but what is the point of having the trials if they are setting that precedent in delivering REM across the fleets when what RSPB Scotland wants is to look at that outcome? The trials have not even proven that that can happen without citizen science on board.

Helen McLachlan: Which trials are you referring to?

Rachael Hamilton: Elspeth Macdonald indicated that trials have been carried out with REM in place to work out whether the outcomes that the Government wants from it will be achieved. What is the point in carrying out a trial when we cannot prove that those outcomes will be achieved? I do not get it, but that might be my personal opinion.

Helen McLachlan: I can only go on what has happened elsewhere across the world and where cameras have been used effectively in fishing operations to provide a greater understanding of the impact of fishing activity on non-target species as well as on target species—let us not forget that we also get a richer understanding of that. For non-target species, in particular, having cameras there to provide data and evidence of the impact of fishing has been vital and has allowed

mitigation where there are mitigation options and we can start to prevent those impacts. When we start to look at how endangered some of the species that we are talking about are, we can see that such measures are vital to getting mitigation out on vessels as well as accompanying it with cameras to make sure that it is working.

The Convener: We will move to questions on sustainability and science, which might tease that out a little bit more. Before we do so, Joe Whitelegg wants to come in.

Joe Whitelegg: As an enforcement officer, I am looking at this from an enforcement perspective. We have an example of where we used REM under a data protection request with the assistance of Marine Scotland to carry out a successful prosecution in the Isle of Man. The Isle of Man has strict curfews and is strict on gear. Using the REM footage as additional evidence—there was other evidence that would have probably been enough to enable a prosecution—we could specifically demonstrate when the fisher used his winches, when he hauled his gear, the fact that he had too much gear on board the boat and the fact that he had too many teeth bars on his dredges. We put that evidence, which was crystal clear, into our package and it enabled a successful prosecution. That is why the Isle of Man Government is so supportive of REM from the enforcement perspective.

Elsbeth Macdonald: That is a good example of how easy it is for the discussion to get muddled around the separation between compliance and what are being described as other potential benefits. Joe Whitelegg has just set out that REM is being used as part of a compliance operation and as a stick rather than a carrot. The carrots that are being dangled around this policy are about scope for better science and more data for marine spatial planning and so on.

Looking at science for a minute, we must not underestimate the resources that it would take to use the data from REM to develop better science for fisheries and the marine environment. That is touched on in the BRIA that supports the SSI. I was surprised at how little the Government seems to think it will cost to deliver some of what it talks about as scientific benefits, because it looks like a very small amount of money. As Ian Gatt said in his opening remarks, resources are very tight. We have some real concerns about the ability of the marine directorate to deliver its current scientific obligations, and I have many reservations about how it could turn the data from REM into meaningful and useful science without having to invest a large amount of money.

The Convener: We will move on to that. It is difficult not to stray into other topics, but we will stick to this one just now. Ariane Burgess has a

supplementary question about requests for REM data.

Ariane Burgess (Highlands and Islands) (Green): I do, and I might also stray there. Elspeth, it is interesting to hear your concerns about the marine directorate and its capacity to robustly monitor the data. I would be interested in hearing your—and, possibly, Helen McLachlan’s—thoughts around the idea of the data that is generated from REM systems being shared. For example, Peru, in 2018, became the second country in the world to share all of its VMS data.

The Convener: I will stop you there, because we will come on to that later. That specific question will be asked. We are looking at the data transmission.

Before we move to the next question, there is one specific question, which may be more for the cabinet secretary. Elspeth, why do you believe that there is the power to serve a data transmission request to a pelagic vessel but no equivalent power to do so to a scallop vessel? Is question more for the cabinet secretary?

Elspeth Macdonald: Yes. I think that that would be a question for her.

The Convener: Okay. We will move on to the topic of offences and penalties.

Emma Harper: Looking at the Scottish Government’s website and the information in front of me, I note that the instrument specifies that offences for breach of the regulations in the Sea Fish (Conservation) Act 1967 have penalties that are set out. Part of it talks about a fine of up to, but not exceeding, £50,000. Other things are listed regarding the court, which can impose additional fines, but not fines exceeding the value of the fish caught in contravention of the act. The Scottish Government’s website talks about Marine Scotland compliance, which is responsible for the monitoring and enforcement of marine and fishing laws. It also talks about how the result can be a fine of up to £50,000. I would be interested in whether you think that the maximum penalty is appropriate and proportionate.

Elspeth Macdonald: The penalties that are set out are in line with the broader suite of penalties available in this area. It seems reasonable that they are consistent with the other penalties for non-compliance with fishing legislation. They do not appear to differ from those that exist in relation to other technical legal requirements on the industry.

Emma Harper: As you said, they are equivalent to other pieces of legislation, but the fine of up to £50,000 would be one of a range of penalties for non-compliance.

Elspeth Macdonald: Yes, absolutely. That is obviously a decision that any court would make, should a prosecution result in a conviction. It would be for the court to decide where on that spectrum the penalty should sit.

Kate Forbes (Skye, Lochaber and Badenoch) (SNP): Fishers are already under a weight of pressure to meet current regulations and face a significant cost in doing so, and there is the risk of conviction and so on. Clearly, we want to ensure that fishermen are doing the right thing, but what could such a fine do to a business?

Elspeth Macdonald: That is a good question. As the BRIA sets out, profitability in the scallop sector, for example, has been falling in recent years. Scallop vessels range in size from small vessels that will fish scallops perhaps only part time to bigger ones for which that will be all that they fish. For a vessel with relatively low profitability—perhaps only £30,000 a year—a significant fine could really eat into the profitability of the vessel and perhaps threaten its viability. That is why it is important that courts think very carefully about how they apply penalties in the event of a conviction.

The Convener: Our next theme is sustainability and science.

10:00

Rhoda Grant: We covered a lot of this earlier, but I will push us back a wee bit. There was discussion about REM being the carrot rather than the stick. Has the Scottish Government been clear with the industry as to how it would work as a carrot? How is the information going to be used for scientific research and to provide more sustainability in supply chains? Has the Government demonstrated those positive impacts to you?

Elspeth Macdonald: From my perspective, no. The impacts are spoken about very much in terms of “could”, “may” and “in the future”, so it is what you might describe as jam tomorrow. There are possibilities here, but we do not yet have any way of describing how we could achieve those or anything concrete setting out a pathway to getting some of the more positive benefits. As I said, I have significant reservations about the resources that would be needed to achieve that.

Rhoda Grant: Helen McLachlan, you talked about the process providing those benefits elsewhere. Can you explain how that works in other countries where the system is in place, what benefits come from it and in what way?

Helen McLachlan: Originally, a lot of the impetus for looking at REM was to do with addressing the issue of discarding and

incentivising more selective fishing that would result in less discarding. That is about what we are taking out of our seas, because that is sometimes quite different from what we land from our fisheries. The idea of improving selectivity was to focus on minimising the stuff that is extra to the targets—being as selective as possible and removing the right fish without touching non-target species.

That has been clearly and successfully addressed in places such as the US, where discarding levels were significantly high in the west coast groundfish fishery. Basically, the fishery was stopped as a result of the high levels of discarding, and the industry was given the opportunity to come up with a solution. The solution was either to go with REM and build that system into operating practice or to take on board observers. As I said previously, they are expensive, they need training and they are not always available, whereas REM came at a much lower cost and fulfilled a lot more functions. The fishery was then able to start operating again using REM. That has been very successful, the fishery has continued and stock levels have increased as a result. In New Zealand—

Rhoda Grant: I am sorry to interrupt. That is interesting, but that almost concerns the policing part of it. I am just wondering how the science—the data that was gathered from REM—was used to create a situation whereby the gear was more selective. The fishery was going to stay closed unless it used REM, so that seems a wee bit like the stick. I am wondering how that information was used to make the fishing more selective, aside from the option of not fishing as much and people being told, “Don’t dare catch anything that you shouldn’t be catching.”

Helen McLachlan: Yes—sure. The problem in that case was stock levels decreasing, so the science was obviously indicating that there was a problem and that the fishery needed to do something about it. Monitoring with cameras allowed for on-going evidencing of what was being removed from the water in the most selective way possible and helped to allow more selective methods.

Fisheries can use a range of gear and can choose to fish in ways in which, and in areas where, they know they will stand a better chance of increasing their selectivity. The cameras help to incentivise that. It is all absolutely reliant on good governance, feedback and communication among the administrations, the scientists and the fleet.

Everybody’s interest is in the sustainability of the resource that is being fished and, equally, in the sustainability of the wider marine environment impacts. An important part of that is how we protect, for example, marine protected areas and

how we evidence fishing in and out of those areas. We have seen bodies such as the Devon & Severn Inshore Fisheries and Conservation Authority, in England, using REM and lauding that as a very successful way to protect its MPAs. As a vessel goes in, the GPS indicates that it is entering the area. It is entitled to do that but, if it starts fishing, winch activity is indicated and the compliance team will be made aware of that.

REM helps with our wider marine protections in relation to those areas that we know are important for the health of our waters.

Rhoda Grant: Does the system give feedback? If someone was fishing in a place where they would not usually fish, would that be indicated? When a fishery is closed, we know that people move out of their usual fishery into a different one, because they have to make a living. Does the system warn people that they are moving into an MPA? Does it warn them of any criteria that they need to meet in different areas? Does it work both ways? Does it give fishers a better idea of what they should be doing where?

Helen McLachlan: My understanding is that it does, but Joe Whitelegg will probably be able to give you more details. I know, from the Devon & Severn IFCA trial, that it will alert the skipper—and the compliance team—when they enter an area, because the co-ordinates will be clear, which will enable them to shift position.

Rhoda Grant: Joe, are you able to answer that?

Joe Whitelegg: I am not sure. All that I can comment on is in relation to our discussions with the providers of REM and our looking at the data side of it. If a vessel with REM fishes in Scotland and then comes down to Isle of Man waters, we need to have access—[*Inaudible.*] We have been told that by the providers. I am not sure whether they could set up a geofence, which, in effect, is a border for a closed area, to show when a vessel goes in and out of that area. However, systems are already in place that do that. The vessel monitoring system can have fences set round it. Fishermen should be aware of the regulations that apply where they are fishing before they go into those closed areas anyway.

The Convener: I have a simple question for Elspeth Macdonald and Ian Gatt. Has the Government been clear on how REM will benefit the likes of seafood supply chains?

Elspeth Macdonald: No, not as far as I am concerned. It is all very vague and general. There might be benefits, but none of those is clear, concrete or tangible.

Ian Gatt: I will back up what Elspeth Macdonald said. It is all very woolly in relation to the marine directorate having discussions with the supply

chain and saying that this is all wonderful and that it will be great for the Scottish seafood market.

As I have said, I am in very close, regular contact with the market—particularly this week—and nobody has said to me on any occasion that they would really like this policy to be taken forward quickly. The focus, certainly from a pelagic perspective, has been on the need to get in place quota-sharing agreements across the north-east Atlantic for the key species—that is, mackerel, herring and blue whiting. That is the focus; it has never been on REM.

Ariane Burgess: This is a very interesting conversation. I remind myself that the SSI and REM sit under the United Kingdom Fisheries Act 2020, which calls on us to work with an ecosystems-based approach, and under the Marine (Scotland) Act 2010. In both cases, we are trying to ensure the long-term success of our fisheries. REM helps us to understand the full picture of the state of our fisheries and how to act appropriately, as and when is needed, in case we find ourselves on the edge of a fisheries collapse.

We have been talking about the data, and I come back to data now. Both the fishing industry and non-governmental organisations have pointed out that REM data could be useful for marine spatial planning and to mitigate the spatial squeeze. I remember the tremendous evening event that the SFF held in the garden lobby a while ago, which raised that issue. I would like to get your views on how REM data could be useful in those ways for marine spatial planning and mitigating against that spatial squeeze. We know that there will be an expansion of renewables, but there are also conservation objectives. I would be interested in hearing your thoughts on that, Elspeth—and then perhaps yours, Helen.

Elspeth Macdonald: One of the challenges that we often raise in discussions about marine spatial planning and in our discussions with the Government is the need for sufficiently granular data to demonstrate the impact that the exclusion of fishing from an area would have on the industry. REM may generate some benefits in that regard by providing more positional data than is generated through VMS. We know that the Government has consulted on making a requirement for vessels fishing inshore to have tracking and monitoring, and we believe that it still intends to do that.

One of the benefits of that would be that it would give us much better information on fishing in inshore areas. That could be very useful for identifying cable routes and so on. Of the several benefits of REM that have been floated in the consultation, in the BRIA and in all the discussions that we have had up until now, that is the benefit that is most likely to be realised.

However, we must be clear that that does not mean that the data is a free-for-all. There will be a lot of issues to do with the commercial confidentiality of data from these systems. When we discuss developments offshore with the Government and with others, we have to be exceptionally careful about how the data is used and anonymised. There are also issues around the privacy of individuals.

We have to be very careful and thoughtful in understanding the constraints on data that REM systems will generate. We should also consider what the objectives of the policy are. The BRIA clearly sets out the objectives as compliance, deterring non-compliance, and accountability to ministers. To me, that makes it very clear that the data generated by the systems should be retained within the Government and that it is not data that can be made freely available to others.

Helen McLachlan: The way in which we use our seas represents a vital interest, and it is important to understand exactly how we are doing that. Indeed, our seas are ever busier, given the introduction of offshore wind developments and the traffic that they incur. It is about making space for nature alongside all the other ways in which we use our seas. As I mentioned, the Devon & Severn IFCA trials are using REM for MPA protection, which is important. We are using the evidence to understand the really important areas for fisheries and for nature, and we are making sure that we can spatially plan that so that we can make it work for both.

It is certainly the case that fisheries still represent the biggest impact on marine biodiversity, but the way in which fishing is carried out, where it is carried out, what it is removing and what it is impacting are all key considerations. REM can help to shed a bit of light on that and can certainly help in the management thereafter, so it is really important.

The Convener: Would anyone else like to come in on that? No.

Ariane—would you like to carry on with your next question?

Ariane Burgess: I will go back to what I was going to ask. In a way, Elspeth began to answer it, but I would like to go a bit further into use of data. Concern has been raised by stakeholders that the marine directorate may not have the capacity to use all the data. I am interested in understanding that.

I hear what you say about the need for confidentiality, data protection and that kind of thing, but there are examples globally of data sharing. Peru, in 2018, became the second country in the world to share all of its VMS tracking data on the Global Fishing Watch platform, so that

anyone can view it. Twelve countries already have data-sharing agreements that allow transparency without breaching commercial confidentiality. There are various ways in which we could do that—for example, by lagging the data sharing by some months and not including individual identifying information. I know that a time lag might not work for an offshore wind company that is trying to get a permission or whatever, but it could work in other situations.

I am interested in hearing what you think about how we could share data so that we could move much more rapidly to understanding what is going on in our seas and get a much better picture.

Elsbeth Macdonald: I do not know the detail of those systems and I am not sure what forms of REM were used, so I cannot comment on them, but our position is clear. We believe that the Government's policy intent on that is very clearly set out. It is about compliance, deterring non-compliance and providing accountability to ministers, so from our perspective, the data should remain within Government.

Helen McLachlan: My understanding is that data-sharing agreements would need to be set up and that data would be anonymised. To step right back from that, I note that Elspeth mentioned the policy and management objectives, which are fundamental to all of this. The ways in which remote electronic monitoring systems are set up might differ, depending on whether you are looking purely at discarding effort within a fleet or are more interested in sensitive-species bycatch. We have to be clear about the policy objectives.

There is the option of monitoring data after the event. The data could be sitting there and if, say, NatureScot had a desire to look at data for a particular species, something would have to be set up, and it would all have to be anonymised and agreed with the industry.

The important thing is that the potential exists and—as you have said—there are clear examples of data sharing being used effectively. It is about getting the systems right. It strikes me that the Scottish Government has looked a lot elsewhere for best practice and is trying to be as careful as it can be in bringing forward the system.

The Convener: There have been times in the past when data has been leaked. A few years ago, data was used to undermine the fishing industry. That put a huge dent in the confidence of the fishing industry in the Scottish Government and Marine Scotland at that time. Will the SSI give you confidence that data will not be shared inappropriately or in a way that the fishing industry is not comfortable with?

Elsbeth Macdonald: I do not think that the SSI necessarily rules that out. That is a moot point.

The Convener: Does it need to rule it out?

Elsbeth Macdonald: Yes—there should be clear legal assurances.

Elena Whitham (Carrick, Cumnock and Doon Valley) (SNP): I am interested in financial implications and timescales for implementation. The committee has received written evidence about fishers being concerned about the level of investment that they will have to make to meet the requirements, should the system come into being. The effect will not be felt equally across the various fishing activities or perhaps even across different sizes of vessels and so on. Such equipment is in place in various places around the world, including Canada, the US, New Zealand and other parts of the UK, which are also looking to bring in a wider model. How appropriate is it that fishers should pay the full costs associated with the purchase, installation and on-going maintenance of REM equipment, and is it clear what those costs would be?

A range of estimates is contained in the business and regulatory impact assessment. Does anybody on the panel have examples from other places in the world where the technology is used of how Governments and fishers coped with the costs associated with it? Have there been any incentives, or has the cost been met by industry?

Elsbeth Macdonald: As I said, the scallop fleet was incentivised to adopt the voluntary REM scheme that has been running thus far. It could see that a mandatory approach from Government was coming and that, if it went down the voluntary route in advance of that, it would be grant funded.

If systems and requirements are being put in place as a requirement of Government for the purposes of demonstrating compliance, deterring non-compliance and providing accountability to ministers, it is only fair that the Government should meet the cost of installing equipment that it requires businesses to have but that will not deliver any tangible, meaningful or—as yet—clearly articulated benefits to the businesses that would bear the cost.

Elena Whitham: Do you have examples from other sectors in which high compliance is required, such as animal welfare? Perhaps there is monitoring equipment in abattoirs for compliance? Is there a comparable example of an incentive being provided or a cost being met by the Government?

Elsbeth Macdonald: Abattoirs are quite a good example, in some ways, because the public pays a very significant proportion of the costs of official controls and of assessing compliance in abattoirs, so there is a parallel. We also have to consider that the systems that are being proposed are more elaborate than, for example, closed-circuit

television at points of slaughter. That it is a different model.

Elena Whitham: I have a question about the lead-in time. It was communicated that there would perhaps be a two-year lead-in, but from what we have before us it appears that the lead-in time has been slightly truncated. Are there concerns about that? On procuring the equipment, we heard earlier today that people are not so sure whether the market will be able to cope with the demand that might be placed on it in the next wee while. Does anybody have comments on lead-in times?

Elsbeth Macdonald: Ian Gatt might be able to comment on that.

Ian Gatt: Certainly, that has been a big issue for us. As I said, the policy has been a long time in development. We have had a lot of dialogue with Marine Scotland over a number of years. It had been clear with us that, once the legislation had passed through the parliamentary process and become law, there would be a two-year period. It was a bit of a shock to us to see the appearance of the hard deadline of the middle of March 2026, because it had been our full understanding that there would two full years before implementation, once Parliament had finished with the legislation. That has broken a bit of trust between the pelagic fishermen and the marine directorate. You should ask the cabinet secretary, when she comes before you, why the timeframe has changed.

The Convener: I think that the timeframe has changed because the Bute house agreement suggests that the legislation should be delivered by the end of the current parliamentary session.

Ian Gatt: I am sorry, convener, but, if that is the case, it should have been communicated to us. We should not have been led down the garden path and told that there would be a two-year lead-in period after the legislation had been passed.

The Convener: Thank you. We now move to a question on the level playing field.

Rachael Hamilton: I direct this question to Joe Whitelegg, initially. There are questions about whether there is a level playing field. The situation is that there are non-Scottish vessels in Scottish waters, but Marine Scotland will require Scottish vessels to have REM. Do you think that that is fair, and how do you relate it to your experience?

Joe Whitelegg: It will be required if the Scottish Government says that it is. Likewise, we have rules and regulations for Isle of Man waters that say that Scottish vessels can go down there as long as they are licensed by the Isle of Man: they must adhere to our regulations. It seems only fair that we would reciprocate and align with Scottish

regulations when our vessels fish in Scottish waters.

Rachael Hamilton: Can Ian Gatt comment on whether he believes that there is a level playing field?

Ian Gatt: That, too, has been an issue that we have been in a lot of dialogue about with the marine directorate and the current and previous cabinet secretaries. In my office in Fraserburgh, I have two letters from the cabinet secretary saying that they are totally committed to there being a level playing field.

What you need to bear in mind is the context that there are about 27 UK pelagic vessels, including 23 in Scotland, and probably in the region of 150 other external vessels fishing in Scottish waters at various times of the year. It is hugely important for us to ensure that the vessels that come into Scotland adhere to the regulations that are applied to us. We were quite pleased that that was seen through to the end.

I would not say that a completely level playing field has been achieved, though, because we must ensure that the REM equipment is operational when we are in international waters or in third-country waters, such as off Norway or off the west coast of Ireland. We do not know what the policy will be in the other countries. For instance, when Norway's or Ireland's vessels are fishing in international waters, will they be required to have REM? That is unknown to us, at this stage.

10:30

I would have thought that it would have been prudent for the Scottish Government to say that it might go with REM in the future, once there is a level playing field with the other countries, but that is not the move that it has made. It has said that we have to have REM regardless of where we are fishing.

The other thing that is slightly concerning is the fact that two types of pelagic vessel are operating in Scotland. The refrigerated sea water vessels in our fleet catch fish and pump the fish into a tank, which then come ashore through being pumped into the factory for processing. The other type, of which there are quite a lot—I imagine that there are in the region of 20 vessels—freeze the fish at sea; basically, the vessel and the factory are one unit. Our concern is that the factory element of the freezer vessel should be adequately covered by REM, so that we are working on a level playing field. To be honest, I am not sure whether that is the case. We see things in the technical specification, but I am not an expert on it. That is a concern that our fishermen have with regard to the level playing field.

Rachael Hamilton: On a practical point, how does the marine directorate ensure that there is compliance among non-Scottish vessels out at sea?

Ian Gatt: I do not know. Maybe Joe Whitelegg is better placed to answer that. Obviously, the directorate uses its assets to look at the VMS data and so on that it has. There are aeroplanes and three ships, but it is a big task to monitor all the vessels that are in our waters, for sure.

Rachael Hamilton: Elspeth Macdonald, do you believe that there is a level playing field? Should there be more information on the number of vessels, where they are from and which of them have had their REM equipment inspected annually?

Elspeth Macdonald: The issues are very much as Ian Gatt has described. For example, the requirement for the scallop fleet will be that any vessel that is fishing in Scottish waters will need to have a system that is compliant, but Scottish vessels that fish outwith Scottish waters will also have to have REM installed and operational when they are fishing elsewhere, whereas other vessels will not.

That does not feel like a level playing field. There might be a level playing field in Scottish waters, although we are unclear about how the Government will seek and receive the same assurances from non-Scottish vessels fishing in Scottish waters as it might seek from Scottish vessels. There is still asymmetry in that, when Scottish vessels are fishing elsewhere, they will still be required, under the full force of the law, to have REM installed and operational, whereas other vessels will not, at the moment. A lot of the scallop fleet will fish in UK waters, but some of the itinerant fleet will also fish in EU waters. The playing field will not be level while the Scottish fleet is under an additional legal obligation that is not placed on other vessels that are fishing in the same seas.

Rachael Hamilton: On whom does the responsibility lie for international or UK-wide discussions about that level playing field?

Elspeth Macdonald: With fisheries being a largely devolved issue, it is for the fisheries administrations in the UK to make their own rules and requirements. Obviously, they have to comply with the wider obligations of things such as the Fisheries Act 2020 and the body of retained law.

The four fisheries administrations co-operate pretty well and talk quite frequently. The fact that Joe Whitelegg is here to give the perspective of the Isle of Man shows collaboration, co-operation and communication. However, at the end of the day, the administrations can choose to do different things.

Rachael Hamilton: Does the future fisheries alliance believe that the SSI has the potential to create an unfair playing field? What is your suggestion to achieve a more level playing field?

Helen McLachlan: We were very pleased that the SSI would apply to Scottish and non-Scottish vessels fishing across Scottish waters, because, as Elspeth Macdonald said, having that in the Scottish zone gives us a level playing field.

As for the requirement for Scottish vessels to use the technology beyond Scottish waters, our view is that it could be a leadership thing, which is happening because of the direction in which fisheries management is going—and in which it needs to go. The broader view is that REM will have to become the standard for sustainable fisheries management in the EU and other coastal states. We might be a leader on that.

When non-Scottish vessels enter our waters and are required to have the technology, there might be an acceleration of its application in their own waters as a result. After all, if they have to have the technology to go into Scottish waters, why would they not consider using it in their own waters? We are rather optimistic that it might be a positive thing elsewhere, as well as in Scottish waters.

Rachael Hamilton: I want to pick up on what Ian Gatt said about there being 150 non-UK vessels fishing the pelagic waters. Is it possible—and does Marine Scotland have the resource—to analyse and share all the data that is collected from REM? We would not want to be biased when it comes to gathering data. We would not want Marine Scotland to target only Scottish vessels, because it would need to use a suitable sampling programme that randomises the data, rather than picking on certain vessels. How will that work?

Helen McLachlan: The committee will be able to hear this at first hand at its session next week, but my understanding is that vessels entering Scottish waters will have to have REM in place as a condition of fishing here. The technology will be there and Scottish administrations will be able to pick up the data or access it.

On the resource that is required, when we first did the calculation of the cost benefit of REM as opposed to traditional methods, it indicated that quite a lot of traditional at-sea monitoring could probably be substituted for greater resource investment in REM. For a quarter of the cost of traditional monitoring, we could have 100 per cent access to data. We do not review 100 per cent of the data—nobody is sitting there reviewing it all—but REM enables review of the key moments, such as when hauls come in.

We should consider the cost of REM application and review as opposed to that of traditional

methods, which incorporate some of the things that Ian Gatt spoke about, such as vessels, aeroplanes and quayside inspections. Some of those could be done away with, because we would have evidence coming in the whole time. There are definitely ways that the resource—and the benefits that come with it—can be delivered.

Rachael Hamilton: Marine Scotland will need a huge pool of human analysers to look at the screens and the data. We know that humans can make mistakes, and there is only a certain length of time that humans can look at a screen. You will need a huge pool of resource to be able to analyse that data and make it meaningful.

Helen McLachlan: Some resources could be reallocated from quayside inspections to train people up to monitor data. The data review process has come on in leaps and bounds, and, with the set-up, one operator can look at 25 or 30 screens quite effectively. It might be different for the scallop and other fleets, but given that, for the pelagic fleet, there is quite a set window, you could bank yourself up, as it were, for that particular season. The way in which the review is being undertaken has come on massively, so it might not require as many people as you might think to effectively review the key bits of data that we need to look at for purposes of compliance and the wider impacts.

Rachael Hamilton: My final, final question is for Joe Whitelegg. How many non-compliance situations have you come across involving vessels that are not registered to your fisheries?

Joe Whitelegg: It depends on what timeframe you are talking about. Ours is not a big fishing fleet—I think that we have 120 licences—and we average perhaps two or three successful prosecutions a year. Those prosecutions can be for all manner of things, from going into closed areas to incorrect gear, fishing outside curfew and taking undersized scallops, if it is the scallop fishery that we are talking about. Therefore, we are not talking about a huge amount of non-compliance, but it is detected by our satellite and tracking systems and, indeed, the fisheries protection vessel, which puts people on the boats themselves. We find most of these things by putting our fisheries officers on the boats to carry out the inspections at sea.

The Convener: On the relationship between the Isle of Man fisheries and the Scottish fisheries, there is a long tradition of Scottish boats fishing in Manx waters and vice versa. However, that relationship has not always been harmonious; I know that we had an uncomfortable situation four or five years ago when Scottish boats had to land scallops in Douglas, which caused some tensions. Can you update us on the current working

between the Scottish Government or the marine directorate and the Isle of Man fisheries?

Joe Whitelegg: We work very well together; indeed, I have already alluded to the case with the Oban office. Obviously, we would put in data protection requests to obtain data, but we do work very well together. I am not necessarily involved in this, but I know that the policy manager has been working with the Scottish Government to develop the policy for the REM, and we are wholly supportive of it. We are glad that you have taken the lead on the matter, and we are not far behind you, because a number of our vessels need to have it for June anyway.

The Convener: I have a final question before I bring in Rhoda Grant. Scottish boats fish in Isle of Man waters and in French waters, too. What would happen if the Isle of Man decided to diverge from the technology that the Scottish Government had specified and if Europe had a different REM specification? Could you see a situation in which scallop boats in Scotland had three, four or multiple sets of technology in order to deliver data for different reasons to different fisheries control authorities?

Joe Whitelegg: The analogy that I would draw would be with the e-log that has to be used and that vessels have had on board for a long time—there are four or five different suppliers of that. Therefore, I think that it comes down to ensuring that the actual specification meets all the requirements. I cannot really give you any more of an answer than that, I am afraid.

The Convener: Thank you.

Rhoda Grant: I have what might be a wee bit of a left-field question for Helen McLachlan. Helen, you were talking to Rachael Hamilton about the effort that has to be made to look at all the data coming in from cameras. Has anyone used artificial intelligence to, say, pick up different species and process that information a lot faster?

10:45

Helen McLachlan: Absolutely. The capability of artificial intelligence is growing day by day, and it is reliant on a lot of information being put in. For example, we know that AI will very quickly identify marine mammals, and we think that seabirds are a possibility. There is also technology that will allow you to identify different fish species, which would mean that you could automatically—and preferentially—open the gate of the end of the net and let out the ones that you have no quota for and catch only the ones for which you do have quota. AI has a tremendous role to play and will continue to contribute to this activity, and I think that we will see it developing in leaps and bounds, as it has done to date in many other areas.

Emma Harper: That question was very similar to the one that I was going to ask. The data being collected will be driven by algorithms, designs and, indeed, artificial intelligence as that moves forward, so I assume that this will be not just a matter of human beings sitting and looking at what comes in from television cameras. I note that putting cameras on boats longer than 10m, which catch more than 90 per cent of the fish in the UK, would cost between £4.8 million and £6.75 million a year, which is less than 1 per cent of the value of seafood caught by the vessels. Basically, then, putting cameras on vessels is a way of managing some of the costs of capturing and interrogating the data, whether by artificial intelligence or by humans. Is it reasonable to say that?

Helen McLachlan: Absolutely. As I have said, a lot of AI will take over more and more of the review process as it becomes more and more capable. At the minute, less than half of the limits of the UK's fishing interests are set in line with the advice of the International Council for the Exploration of the Seas, which indicates that we are not doing well in achieving our sustainability objectives in fisheries. This sort of information could help to improve that situation.

Elsbeth Macdonald: We need to recognise that AI will not happen on its own. I come back to my point about the need for the Government to invest in this technology, if these benefits could ever be realised, as well as the concerns that we have expressed here and in other fora about the Government's capability and capacity to do that. I reiterate my point that a lot of this sounds rather like jam tomorrow instead of something that can be meaningfully delivered.

On Helen McLachlan's point about setting total allowable catches in line with ICES's advice, it is important to remember that sustainability has three pillars to it. It is about not just biological sustainability but social and economic sustainability, and it is incumbent on managers in our fisheries administrations to take all those factors into account in setting TACs.

The Convener: Finally, I seek a yes or no response to this question, although I do not think that I can ask Joe Whitelegg this. I note that the lead-in times for introducing REM have been accelerated by the Bute house agreement, which could leave fishing boats unable to find people to repair their equipment as quickly as they might, meaning that the boats could not go to sea. Should the Scottish Government compensate fishers in the event of that happening?

Elsbeth Macdonald: Yes.

Ian Gatt: Absolutely. As I have said, our seasons are very short, and it would be a tragedy if a vessel had to be tied up and lost its entire

fishing season because of the malfunctioning of the equipment.

Helen McLachlan: Having spoken to a number of experts, I think that the period between now and 26 June gives adequate time for 22 vessels to be kitted out.

The Convener: Okay. Thank you very much.

That brings us to the end of the session. We have run over time quite a bit, but I think that that additional time has allowed us to explore some of the issues a little bit more. Thank you very much for your time this morning.

10:50

Meeting continued in private until 11:43.

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