HOUSE OF LORDS

International Relations and Defence Committee

Corrected oral evidence: UNCLOS: fit for purpose in the 21st century?

Wednesday 24 November 2021

10 am

Watch the meeting

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

Evidence Session No. 9 Heard in Public Questions 78 - 83

Witnesses

I: Professor Douglas Guilfoyle, Associate Professor of International and Security Law, University of New South Wales Canberra; Professor Anna Petrig LLM, Chair of International Law and Public Law, University of Basel.

USE OF THE TRANSCRIPT

1. This is a corrected transcript of evidence taken in public and webcast on www.parliamentlive.tv.

Examination of witnesses

Professor Douglas Guilfoyle and Professor Anna Petrig.

Q78 **The Chair:** Good morning. I welcome to this meeting of the International Relations and Defence Select Committee in the House of Lords Professor Douglas Guilfoyle, associate professor of international and security law at the University of New South Wales, Canberra, and Professor Anna Petrig, chair of international law and public law at the University of Basel. Thank you for joining us to share your expertise as we come close to the conclusion of taking evidence for our current inquiry on the United Nations Convention on the Law of the Sea. We ask the question: is it fit for purpose in the 21st century?

At this stage, I always remind our guests and Members that the session is broadcast and on the record and that a transcript is taken. I also remind members of the committee, as always, that when they ask their questions if they have a relevant interest they should declare that first. As ever, I will begin by asking the first question, which tends to be rather general in nature, and I will then turn to my colleagues to ask more focused questions. When I turn to my colleagues, I anticipate that each of them may wish to ask a supplementary related to their initial question.

Let us go to the first question. Are current laws regulating maritime security at sea capable of dealing with contemporary challenges in the light of recent technological advancements such as marine autonomous vehicles? Dr Anna Petrig, may I start with you, please?

Professor Anna Petrig: Thank you for very much for the question, and thank you very much for the invitation to the committee. It is an honour and pleasure to speak to you today on various issues relating to UNCLOS.

As the question is very broad, I will focus on one type of security threat, which is maritime crime. Autonomous ships are already, and will increasingly become, an important component of the commission and suppression of maritime crime. Offenders have already started using this technology. You may have heard of the attacks carried out by Houthi rebels in the Red Sea. Autonomous vehicles augment the capabilities, effectiveness and reach of those enforcing the law, as you have heard from Commander Tuckett.

That begs the question whether the legal framework, specifically the UNCLOS, is fit for purpose, and whether it can accommodate the use of autonomous ships by enforcers and offenders alike. One could argue that there has been constant technological change and that UNCLOS has always been capable of absorbing new developments, and its norms are flexible enough. However, it cannot be ignored that all past developments have aligned with the assumption on which the international law of the sea rests—the presence of persons on board, and the fact that a ship has an onboard crew that is responsible for its navigation, task and mission.

Indeed, maritime history dates back thousands of years, and if there is just one truism, it is that ships have people on board; they are manned. This certainty has come to an end with the advent of unmanned ships,

autonomous ships, without an onboard crew. That really queries the basic assumption on which provisions on maritime crime rest, which is that perpetrators are on board suspect ships and law enforcement officials are embarked on ships authorised to enforce the law, so that enforcers and suspects encounter each other at sea and physical human-human interaction in theatre takes place. If you have instead a human-machine or a machine-machine interaction, a series of rules or procedures will no longer be applicable as they were in the past: how you contact a ship without an onboard crew, how you check its nationality if you have no one on board to hand out certificates, and how enforcers identify themselves as authorised law enforcement officials vis-à-vis suspected ships and so on.

It also has a bearing on the offences referred to in UNCLOS. If you read through the UNCLOS, the almost symbiotic relationship between the onboard crew and the ship that was a certainty in the past transpires in the wording of many provisions. Indeed, many provisions refer to the ship engaging in prohibited activity rather than the person. If you read, for instance, Article 111 on hot pursuit, it refers to "good reason to believe that the ship has violated the laws and regulations" of the coastal state. The drafters of UNCLOS did not deem it necessary to distinguish carefully the ship and the person on board. Whether this ambiguity in the UNCLOS helps or hinders the integration of the commission of offences by unmanned ships needs further discussion.

What can already be said with certainty at this stage is that UNCLOS generally does not define the offences themselves, with the exception of piracy and some others. The UNCLOS rather sets out the rules—for example, on co-operation or jurisdiction—for offences that are defined externally, either in other international treaties or in domestic law. To use the example of hot pursuit again, it states that the coastal state can engage in hot pursuit if there are good reasons to believe that the ship has violated the laws and regulations of the coastal state; and Article 108 stipulates that states "shall cooperate in the suppression" of drug trafficking contrary to international law—again, a reference to external law. We cannot fix the problem by limiting ourselves to UNCLOS, as UNCLOS interacts with a number of other treaties in the field of transnational criminal law and domestic law.

As regards the four SUA treaties, we now have a discussion within the IMO as to whether those treaties can accommodate autonomous ships, but for other transnational crime treaties—for instance, those adopted under the auspices of the UNODC—we do not have that discussion yet. Adapting the legal framework is a very complex endeavour.

Let me conclude with a word on regulation. Regulating emerging technologies is far from obvious, including autonomous ships, or even to identify the object of regulation. What to regulate is not evident because we cannot make a reliable forecast now about the ultimate results of technological transition. Our experience with such novel types of ships is very limited, and sometimes our imagination is too. It is hard to foresee now all the legal issues that will come up in the context of autonomous ships. It is also difficult to tell when to regulate, and when is the

appropriate time for regulatory intervention. Premature regulation may carry the risk of poor alignment with the ultimate technology and may also lock in inferior technological choices. That would suggest not engaging in rushed regulatory action.

At the same time, as I mentioned, offenders and enforcers already use the systems, so that rather suggests urgent action. It may take a lot of time to adapt new rules. Waiting and hurrying at the same time is a bit of a paradox. The adoption of new rules requires a certain sense of imminence. A technology must generally be considered forthcoming to garner sufficient support for regulation, and I do not know whether we are already at that stage when it comes to autonomous ships and maritime security.

On the question of how to regulate, I guess a formal amendment of the UNCLOS is an anathema. The appetite to open up other treaties may be very limited as well. Is interpretation sufficient? It is for some provisions, and not for others. There are means of informal amendment through subsequent practice and agreement, or the development of soft law. There are a whole range of issues just on how to regulate, which need to be answered. Thank you very much.

The Chair: Thank you. Professor Guilfoyle, I turn to you now.

Professor Douglas Guilfoyle: Thank you. I broadly endorse everything that has just been said by Professor Petrig. Turning to the other side of the equation on civilian regulation, you have heard reference to the role of the International Maritime Organization in previous hearings and to the idea of UNCLOS as a constitution.

A constitution does not try to set out every possible rule for a society; it leaves things to other later legislative enactments. In the case of UNCLOS, it often refers to things such as internationally accepted or generally recognised standards, and those are often taken to be the rules set out in various IMO conventions. The IMO conventions have the feature that they are much easier to amend than UNCLOS because you have schedules of rules and standards that can be changed by IMO processes fairly readily.

Recently, an IMO scoping exercise, concluded this year, on what it referred to as marine autonomous surface ships, looked at whether various rules would need to be dealt with by equivalency, by amendment or by a new convention. Where that process appears to be going is the idea that there should be a tailored MASS or marine autonomous vehicle code, which could then be scheduled to SOLAS and made compulsory, effectively, on all world shipping through SOLAS, and then incorporated by the rules of reference to generally accepted standards into UNCLOS itself. There is a path forward for catching up with MASS vehicles on the civilian shipping side. For the sake of time, I will leave it at that.

The Chair: Thank you very much indeed. I turn to Lord Stirrup for the next question.

Q79 **Lord Stirrup:** Thank you very much. Perhaps you could focus more

narrowly on the issue of modern piracy. Could you identify for us the key legal challenges in addressing that problem? How effective are the current mechanisms, including UNCLOS and indeed its subsidiary and complementary instruments, in that area?

Professor Douglas Guilfoyle: Thank you for that question. Turning to UNCLOS first, broadly, I would say that the suppression of piracy on the high seas, at least in recent decades, has been a success story for UNCLOS. Articles 100 to 107 and 110 create a broad and flexible jurisdiction to suppress piracy on the high seas and to prosecute those offences in national courts. The notable limitation is that in deference to coastal state sovereignty the law of piracy does not extend to crimes committed within a territorial sea. Such incidents are usually called armed robbery against ships.

To take a major, relatively recent, example, the success of the multinational counterpiracy operation off Somalia rested in treating the law under UNCLOS as a framework for co-operation, not something that of itself needed to be reformed or fleshed out with more detail. The suppression of Somali piracy in the end essentially had three limbs: international naval patrolling, coupled with prosecution of pirates in willing neighbouring states such as Kenya and the Seychelles under their own national laws; measures of self-protection taken by the shipping industry, such as barriers to boarding and the creation of secure citadels to which the crew of an attacked vessel could retreat, and those were to some extent enforced by insurers; and collaboration with the effective authorities on the ground in Puntland and Somaliland to strengthen counterpiracy operations ashore.

My point is that the existing law of piracy has proved sufficiently flexible to conduct those operations and to prosecute pirate financiers and kingpins who remained largely ashore but conducted acts of facilitation captured by Article 110 of UNCLOS. To the extent that new international law is needed to authorise certain operations in the territorial sea of Somalia, relevant legal authorities were provided jointly by a UN Security Council resolution, or a series of them, with the concomitant support of the Transitional Federal Government of Somalia. All of that was achieved through international co-operation co-ordinating those broad international powers with adequate measures of national law. Happily, calls to establish a stand-alone international piracy court fell on deaf ears.

The stickier problem is armed robbery against ships. As I have mentioned, piratical acts can occur in territorial seas. Countries bordering the Malacca Strait have had significant success in repressing armed robbery against ships through establishing information-sharing centres and co-ordinating action through them. There has been rather less success in repressing so-called petro-piracy off west Africa, largely due to lack of capacity rather than lack of legal authority.

On allied instruments, the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation is often invoked as a potential gap filler. It has many of the features of a modern terrorism suppression convention, with principles on extraditing and prosecuting

suspects and taking them into custody if you find them in your jurisdiction, but in practice it has been very little used. In the interest of time, I will leave my comments there.

The Chair: Thank you. Professor Petrig.

Professor Anna Petrig: Thank you. I very much agree with what Professor Guilfoyle has just said. The term "modern piracy" is generally used to refer to piracy, as Professor Guilfoyle referred to it, in Somalia and off the coast of the Gulf of Guinea. However, in light of what we discussed earlier—offenders using autonomous ships to cause havoc at sea—the term "modern piracy" could take on a new meaning in the near future.

Let me say something about the use of autonomous ships and piracy. As Professor Guilfoyle said, the suppression of piracy was a success story for UNCLOS. It turned out to be a legal framework that works in practice when it comes to traditional modern piracy. The question is whether the offence of piracy can be committed by an unmanned offender ship such as a remote-controlled or pre-programmed craft. We already have those types of attacks in the Red Sea.

Why could there be a doubt? Piracy as defined in UNCLOS requires that the act of violence is committed by the crew or the passengers of a private ship. The question is whether the explicit reference to crew only covers onboard crews or also remote crews and, if a remote crew qualifies, whether that person must have direct and immediate control over the vessel through remote control or whether it could be a person simply launching a craft that will collect information on its way and take a decision in relative independence of a human. Many provisions of UNCLOS can be interpreted in a very broad and evolutive way, but I doubt whether we can stretch the wording of a provision that pertains to criminal law too much, because there is also the principle of legality that requires that persons know what kind of conduct is prohibited.

I will close with a word on enforcement jurisdiction and piracy committed by autonomous offender ships. UNCLOS is providing for universal enforcement jurisdiction over piracy. However, if the offence is committed through the use of a remote-controlled or pre-programmed craft, the perpetrator may act from dry land. As UNCLOS regulates issues relating to the sea, it obviously does not govern enforcement action on land. In the case of Somali piracy, the UN Security Council plugged that jurisdictional gap and granted third states enforcement powers on Somali territory. However, states were very reluctant to act on those powers. Their readiness to take enforcement action at sea has been much greater. If an offender commits piracy from dry land with an autonomous ship, the exercise of enforcement jurisdiction based on the flag or universality principle will to some extent be deprived of substance as a matter of fact.

At the same time, the territoriality principle becomes primordial in the context of maritime crime, which is an important jurisdictional shift. To conclude, the reliance on autonomous ships to commit crimes such as

piracy makes it really necessary to reconsider our perception of how the land and the sea are connected when it comes to the commission of crimes and jurisdictional issues.

Lord Stirrup: Thank you very much. In the answers to both questions so far, we have focused very much on the challenges to maritime security and safety of new technologies such as maritime autonomous vehicles, but we have not said anything about the opportunities that new technology might offer for improving security and safety. Are you aware of areas where that could happen, and are there implications for UNCLOS and the subsidiary instruments in enabling people to use such technology in the protection of shipping rather than the attack of shipping?

The Chair: I was going to invite either of you to go first, but in the virtual world it is very difficult for you to do that, so can I start with Professor Guilfoyle?

Professor Douglas Guilfoyle: Thank you for that question. The use of marine autonomous vehicles in defensive operations beyond a strict naval context is still an emerging field, but one could readily hypothesise, for example, that in high-risk piracy areas one could have, essentially, maritime drones acting as an early warning system for vessels. That was certainly talked about during the Somali piracy crisis, but nothing in particular came of it. On Professor Petrig's earlier comments about some of the provisions of UNCLOS that refer only to vehicles, without necessarily specifying that they be crewed or not one could imagine marine autonomous vehicles commencing a hot pursuit.

You have seen in previous sessions that the strict letter of the law is a little outdated in requiring someone with a flag and a loudhailer to yell at another ship before commencing a hot pursuit. It has been accepted in the case law that those provisions are to be interpreted in line with changing technology. There would be no reason, I think, why an unmanned craft could not give a vessel a warning that pursuit was being commenced, in the same way as an unmanned aerial vehicle could act like aircraft that are presently authorised to commence hot pursuits under UNCLOS. There are a number of opportunities.

To double back very briefly to a point that Professor Petrig made, as is the nature of lawyers, I take a slightly different view of some provisions of UNCLOS. One could look to the broad definition of a pirate ship in Article 103 of the convention and the offence of being involved in the operation of a pirate ship or the offences of intentionally facilitating the operations of a pirate ship. Those offences are not necessarily, it seems to me, tied to being operations at sea. [I can accept] that this would certainly be an expansive interpretation. Where I completely agree with Professor Petrig is that all the enforcement powers UNCLOS gives you presume that you are on the sea. There is no authorisation to go into another state and seize or arrest one of those people. You would still have to go through ordinary mutual assistance or extradition procedures to try to get at people who had operated remote pirate ships from shore. With that, I pass to Professor Petrig.

Professor Anna Petrig: Thank you. I very much agree with what Professor Guilfoyle said about autonomous ships used for enforcement purposes. We are still very much at the horseless carriage stage of this technology, and autonomous systems are mainly used in support of traditional enforcement vessels. I see huge potential for intelligence reconnaissance and surveillance activities for these types of ships. There are already independent autonomous enforcement ships on the market, but they are all in a test phase. I guess there is huge potential to enhance their efficiency and reach and to reduce risk for humans carrying out enforcement operations.

However, the law needs to be adapted in several respects. For instance, we have the SUA conventions. There is an article comprising a lot of safeguards that need to be respected by law enforcement officials, and there are a lot of provisions that cannot be readily applied. For instance, a law enforcement official must show his ID to suspects to prove that he is authorised to enforce the law. You can have means to do that, but you cannot readily apply the provision in that new context.

The Chair: Thank you. I next turn to Lord Boateng.

Q80 **Lord Boateng:** What is your assessment of the outcome of COP 26 from the perspective of challenges posed by climate change to the sea? Did COP 26 manage to address those concerns?

Professor Anna Petrig: My assessment of the COP 26 results from an ocean perspective specifically varies depending on whether I emphasise their importance for the UNFCCC process or whether the results are sufficient to keep the negative consequences of climate change for the oceans in check. Let me start with the relevance of the COP 26 results for the UNFCCC process—the United Nations Framework Convention on Climate Change. It is beyond doubt that the oceans play a very essential role in climate regulation. I guess we could refer to it as the engine room of the climate system.

In light of that, you would think that the oceans played an equally essential role in the UNFCCC and in the 2015 Paris Agreement, but they really do not. The oceans have not received the place they should merit in those legal frameworks. There is no explicit reference, for example, to sea level rise in the UNFCCC, and hardly any explicit reference or mention of the oceans beyond the preamble in the 2015 Paris Agreement, not so much because of lack of awareness of the climate-ocean nexus in 2015, but rather due to the concern that adding that element could jeopardise the already fragile negotiations and consensus at the time. Despite the fact that the UNFCCC does not adequately reflect the climate-ocean nexus, and thanks to the efforts of many different actors, more and more space was made for the oceans in the UNFCCC process and workstreams in the past years. However, ocean considerations were not streamlined in the main formal process of the UNFCCC. That changed with COP 26.

In Glasgow, ultimately, the oceans were formally incorporated in the UNFCCC process. The Glasgow Climate Pact, one of the outcomes, comprises two important points. First, the COP invites all UNFCCC work programmes and bodies to include ocean-based actions in their work

plans and mandates for the future, and they need to report on that. Secondly, the COP invited the Subsidiary Body for Scientific and Technological Advice to hold an annual dialogue to strengthen ocean-based action and prepare respective reports for the COP. In streamlining the oceans into the formal UNFCCC process, the tide has been turning with Glasgow. COP 26 is certainly a big step forward.

When it comes to the second aspect, whether the COP 26 results are sufficient to address the negative consequences of climate change for the oceans, it is important to emphasise that much depends on the actual implementation of the results of the decisions taken in Glasgow. Even if fully implemented, I seriously doubt that the COP 26 decisions are enough to address the negative consequences of climate change on the oceans, such as sea level rise, ocean acidification or ocean deoxygenation. We have all heard the statements of small island states that noted progress but at the same time stressed the need for further action.

I have a last point to show how COP 26 has been tied to UNCLOS. On the first day of the COP, Tuvalu as well as Antigua and Barbuda announced the establishment of the Commission of Small Island States on Climate Change and International Law. That commission was explicitly authorised in its agreement, when it was established, to request an advisory opinion from the International Tribunal for the Law of the Sea. I see various potential questions relating to UNCLOS for such advisory opinion: the legal consequences of sea level rise on baselines and the outer limits of maritime areas; the legal consequences of sea level rise for islands and rocks; the rights and obligations of states regarding the protection of oceans as part of the climate system and so on. In that respect, too, COP 26 was a milestone on what could come in environmental justice and addressing that pressing issue through courts and tribunals.

The Chair: Professor Guilfoyle, would you like to add to that?

Professor Douglas Guilfoyle: Yes, I endorse everything that Professor Petrig has just said, but I will underscore a few points. We are starting from a low base with COP 26. The UN Climate Change Conference process to date has largely failed to address the challenges posed by climate change to the oceans. Bluntly, the level of carbon dioxide in the atmosphere would be much higher had not so many of our emissions been absorbed by the oceans. Nearly half of all carbon dioxide released in the period since industrialisation by human activity has been absorbed by the oceans. That has resulted, as Professor Petrig noted, directly in ocean acidification, which has increased by about a third in 200 years. COP 26 represents some progress on a procedural front in bringing ocean issues more into the mainstream of the workstreams associated with COP, but I would characterise those as small steps in the right direction that have come rather late.

Building on Professor Petrig's last point about how UNCLOS legal obligations intersect with climate change, what we are doing at present under COP is not enough to meet states' obligations under UNCLOS. Not only is there a general duty to protect and preserve the marine

environment found in Article 192, but under Article 212, "States must adopt laws and regulations to prevent, reduce and control pollution of the marine environment from or through the atmosphere, applicable to the air space under their sovereignty and to vessels flying their flags". Introducing CO_2, or indirectly excess heat energy, into the oceans would be relatively straightforward to class as pollution of the ocean under Article 1 of UNCLOS. There are direct obligations to do more found in the convention that are as yet perhaps underutilised, and we can expect to see small island states bringing dispute resolution cases seeking clarification on the content of those obligations as regards other UNCLOS parties.

Lord Boateng: Professor Guilfoyle, you referred to small island states. If Article 212 is a due diligence obligation, how can it be said that Australia, for instance, is fulfilling its obligations in that respect in its own policy in that area, which would have implications for the Great Barrier Reef? More generally to you both, what needs to be done between now and the next COP in Egypt better to integrate the law of the sea and its obligations with the climate change regime and to address the issue of ocean acidification?

Professor Douglas Guilfoyle: I will not hold myself out as an expert on ocean acidification per se. It may be that your next witness, Professor Duncan French, can be of more assistance to the committee on some of the overlaps with international environmental law. As an Australian citizen, and speaking only in my capacity as an Australian citizen, I do not think Australia is doing remotely enough in relation to the level of climate change catastrophe we potentially face.

Going to your second point, to some extent we get to the difficulty in international law, as with the legal profession in general, that things become siloed and cut off from each other, and that you have law of the sea experts who have invariably not spoken to climate change experts or broader environmental lawyers. What I think the law of the sea can do is provide additional legitimacy or moral leverage for those making the case that there are other issues that need to be incorporated in the climate change framework. Recourse to the International Tribunal for the Law of the Sea for an advisory opinion by a number of the smaller states could elevate those issues and not only give legal guidance but provide a degree of moral pressure on states to take these questions more seriously. I will leave it at that.

Lord Boateng: Thank you very much.

Professor Anna Petrig: I very much agree with Professor Guilfoyle's remark on silos; the lawyers do not necessarily speak to those dealing with climate change from other perspectives. In the context of climate change, we speak a lot about adaptation. I looked up the definition yesterday, and it refers to adjustment in ecological, social and economic systems, but it did not mention the law. I guess international law could and should also be seen as a tool for adaptation. It is necessary to discuss whether and how international law, specifically UNCLOS provisions, should adapt to the new facts that are created through

climate change, rising sea levels or islands that become uninhabitable or submerged altogether.

Now, we have the very concrete steps by the Commission of Small Island States on Climate Change and International Law. The fact that in the agreement it mentioned the idea of asking ITLOS for an advisory opinion is a very concrete step that is likely to be taken. I am aware that the UK was reluctant to recognise the advisory jurisdiction during the 2015 advisory proceedings before the ITLOS in the request for an advisory opinion submitted by the Sub-Regional Fisheries Commission. The UK may reconsider its position and consider supporting the initiative should it crystallise further, because in international law there are pressing issues that need to be solved, which are also discussed in the International Law Commission. A common and intradisciplinary effort is really needed.

Lord Boateng: Thank you.

Q81 **Lord Teverson:** Thank you, professors. One of the themes that we have had through this inquiry is the failure of the flag state system, in that if there is a problem on the high seas and there is an intervention it seems to stop as soon as you try to get permission from the flag state Government to intervene on a vessel on the high seas. It just does not work. We have situations where states that have those vessels do not have the resources or the inclination to enforce their obligations. This seems to me a major problem in how international jurisdiction works on the high seas. Is there a way around it? How do we stop that? It seems to me that these states are minnows in international geopolitics. Surely, there must be a way to sort it out. We do not have the same issues in the aviation industry, for instance.

Professor Anna Petrig: In theory, exclusive flag state jurisdiction was developed as a concept to avoid that ships on the high seas, which are not subject to any state jurisdiction, float in a legal and jurisdictional vacuum. But in practice it has turned into one of the main reasons for the jurisdictional vacuum on the high seas, because we have many flags of convenience. In the 1950s, open registries accounted for not even 5% of the world's fleet, and today the top three flag states are all listed as flags of convenience by the International Transport Workers' Federation. There is not enough time to retrace the development of flags of convenience, but the reasons behind their surge are primarily economic.

A big question is how to end the race to the bottom whereby some shipowners have a competitive edge because they have lower costs and less regulation. Others are under pressure to follow and there is a true exodus. Some flag states established so-called second or international registries to repatriate tonnage lost to flags of convenience, but we still have this race to the bottom, a lowering of standards-logic behind the second registries. To break the cycle, it would be necessary to have a genuine link that must exist between the ship and the flag state, not a purely formal link but one added with content.

That very goal has been pursued by the United Nations Convention on Conditions for Registration of Ships that was adopted in 1986. Even though the convention was not very ambitious and was the fruit of

compromise, it only attracted 14 ratifications, not even enough to enter into force. For as long as we do not change the fundamental economics below the phenomenon of flags of convenience, it will be difficult to achieve change.

For autonomous ships there is also an issue. The provision of UNCLOS that pertains to flag state jurisdiction is based on the assumption that the master, officers and crew are all on board the ship. In the context of the traditional ship, the jurisdiction of the flag state is extended both to the moveable property, the ship, as well as to the crew on board, and the master is a prime attribution subject in terms of criminal liability. In the case of fully autonomous ships, the master, officers and crew are no longer on board; the bridge is taken ashore, so to speak. The question is then whether the bridge must be taken ashore to the same country as the flag state. If an autonomous ship is registered in Switzerland, the remote operation centre and the person operating the ship would also need to be in Switzerland.

In my view, a bifurcated system where the ship is registered in state A and the remote operation centre is located in state B should be avoided, as it may render enforcement of the law by the flag state even more illusionary than it is already in the context of traditional ships. To pursue the example, if the autonomous ship is registered in Switzerland but the person operating it is sitting in the UK, and the person is charged with the commission of a crime—let us say, smuggling of prohibited items—Switzerland, as the flag state, will only be able to take enforcement action against the ship as the moveable property, and not against the operator sitting in the UK; Swiss criminal law will not necessarily extend to the UK. Compared with traditional ships, Switzerland, as the flag state, would essentially be stripped from many means to enforce the law.

In our example, the UK and Switzerland would certainly co-operate to enforce the law, but there may be states that see hosting remote operation centres as not much more than a business case and have no real interest in enforcing the law. To cut this long story short, in the case of autonomous ships it is important to define the general link requirement in such a way that not only the ship but the bridge ashore has a genuine link to the flag state, and a genuine link in the sense of being located in the territory of the flag state, otherwise there is a risk that the genuine link becomes highly virtual in the context of autonomous ships. Those issues will be discussed soon in the IMO, in the context of a MASS code.

The Chair: Thank you. Professor Guilfoyle, is there anything you wish to add?

Professor Douglas Guilfoyle: There are a couple of points I would like to add. One of the difficulties is that when it comes to the principle of exclusive flag state jurisdiction, to use the tech jargon it is not a bug, it is a feature. It is fundamental to the way the law of the sea works, so it is very difficult to extract. To look at the potential legal fixes and other ways forward, Professor Petrig highlighted the Convention on Conditions for Registration of Ships of 1986, which would have required a certain level of ownership in a vessel by nationals of the flag state and that the

owners be adequately identifiable. The idea was that there should be sufficient ties to the flag state that it could effectively exercise jurisdiction, but, as noted, it has attracted only 14 of the 40 ratifications it needs to enter into force, and it has not attracted any new ratifications since 2012.

The alternative legal possibility that Professor Petrig highlighted is the requirement that there be a genuine link between the vessel and the flag it flies, which is an older principle of the law of the sea but is found now in Article 91 of UNCLOS. I want to underscore the ways in which it has been very difficult to give those general words hard, specific legal content. In the lead-up to the 1950s work on the law of the sea that resulted in the Geneva conventions, the International Law Commission put a lot of work into trying to formulate an international minimum standard for the concept of genuine link and failed. Essentially, the problem was that anywhere you drew a line for meaningful legal supervision, the countries falling below that line objected to its being brought into a UN treaty.

The alternative theory about deploying the genuine link idea has been that other states should be able to refuse to recognise the flag a vessel is flying when they believe there is good evidence that there is no genuine link. That would constructively render such vessels stateless and would enable them to be subjected to the jurisdiction of any warship or government vessel they encountered. That might seem attractive, but the theory has not found favour due to the obvious potential for abuse. Thus, the International Tribunal for the Law of the Sea has rejected that line of argument, principally in the MV "Saiga" and MV "Virginia G" cases, holding that, while the idea of a genuine link is more effectively to secure implementation of flag state duties, it does not actually provide criteria for other states to challenge the validity of a ship's right to fly a flag.

Absent any direct legal fix, going back to Professor Petrig's point, if the underlying motive for having open registries or registries of convenience is financial, the only way to shut them down, it would seem to me, would be to make other forms of trade aid or financial assistance to such states conditional on them either cleaning up or closing their registries, which would probably require a coalition of states willing to impose co-ordinated sanctions. By analogy, we have occasionally seen that kind of action by regional fishing organisations against blacklisted flags or even involving diplomatic efforts co-ordinated against particular flag states. I will leave it there.

The Chair: Thank you.

Lord Teverson: I will keep my supplementary extremely short. Is there an appetite among the international community to do something about this, or is it too difficult?

Professor Douglas Guilfoyle: I have not seen the appetite yet, but that does not mean it could not be found.

Professor Anna Petrig: I agree. There is certainly awareness of the problem, but I do not see concrete steps for real change yet.

Lord Teverson: Thank you.

Q82 **Lord Alton of Liverpool:** Professor Guilfoyle and Professor Petrig, thank you very much for the evidence you have been giving us. Can I invite you to say something to us about the relationship between UNCLOS and the upholding of human rights? During the inquiry, we have been told that in the case of human rights at sea the dominant challenge is enforcement of existing human rights law rather than gaps in the law. It would be very helpful to us if you could advise us what should be done to improve enforcement of human rights law at sea and, as there will not be time for a supplementary, to incorporate in that something about the plight of refugees at sea and especially the position of exploited seafarers. Thank you.

Professor Douglas Guilfoyle: Thank you for the question. I would agree with that assessment. The issue is not the law per se but its enforcement. As you have heard from other witnesses, the key difficulty is that oceans cover 70% of the earth's surface, and that provides a lot of space to hide relative to the enforcement capacity represented by the world's navies and coastguards. The analogy is that we are attempting to police a city like London or New York with half a dozen patrol vehicles.

The best way to deal with crime at sea is to attack its profitability. In the fisheries sector, that has traditionally involved denial of access to markets through denial of entry to port. To that end, regional fisheries management organisations compiled, and shared internationally, blacklists of vessels suspected of illegal fishing, and sometimes named and shamed bad flag states. The difficulty when it comes to human rights with that kind of approach is that some of the worst offending vessels, especially in the fishing industry, rarely if ever enter port and are capable of operating at sea almost indefinitely. I do not think direct maritime enforcement is necessarily going to yield results.

One thing that one might look at creatively is taking a leaf from a different playbook—for example, the US State Department's trafficking in persons report, which goes to some of the other issues you have raised and has become a significant tool of soft power in US diplomacy on that particular issue. No state wants to be identified as having a trafficking problem. A similar initiative perhaps could focus on human rights at sea. In the particular UK context, financial sector sanctions could perhaps be imposed on renegade actors, be they individuals, corporations or flags. Perhaps the relatively new UK Magnitsky Act legislation could be a tool to that end.

My underlying point is that maritime criminality is a very tough nut to crack. It is easier to displace offenders, whether to another flag or to operating from another territory or in another form of criminal enterprise, than it is to stamp out the offending. I will leave it to Professor Petrig from there.

Professor Anna Petrig: Thank you. When we hear the words "enforcement of human rights at sea", we may think of law enforcement proper, and that is certainly a very important component in the quest to enforce human rights at sea. As Professor Douglas Guilfoyle pointed out, there is a strong link between transnational crimes and human rights abuses at sea. However, in my view, much broader action than law enforcement proper is necessary to ensure that human rights obligations are taken seriously at sea.

We need to work towards what I call a culture of compliance with human rights at sea. To achieve such a culture of compliance, a whole raft of different measures at different levels is necessary. This also pertains to refinement of the law, to make sure that the human rights obligations that are drafted in a fairly abstract and general way really trickle down into domestic law and operational documents such as rules of engagement, for instance.

I agree that there is no gap in the law as such. The human rights treaties apply to all persons, whether they are on dry land or at sea. We moved beyond the idea that human rights treaties do not apply at sea. It was still argued a decade ago by some states. However, there is still a lot of uncertainty surrounding the concept of human rights at sea. Who is obliged to guarantee human rights at sea? The coastal port or the flag state? What triggers the applicability of human rights at sea? What is the exact scope of the obligations when applied at sea? Are the obligations the same as on land? Maybe you have heard from the European Court of Human Rights. It coined the expression that wholly exceptional circumstances reign at sea. So far, that concept has, essentially, been used to justify a more lenient standard at sea compared with the one applied on land. For example, it necessarily takes a longer time to bring a suspect seized on the high seas promptly before a judge compared with a person arrested on land. However, in my view, these wholly exceptional circumstances could in specific situations require that we adhere to a stricter standard than on land. People at sea find themselves in a hostile environment where they are particularly vulnerable. You mentioned refugees.

You may ask yourselves why all these fundamental and important questions are not yet settled. After all, international human rights law is not a new branch of law. This has to do with the fact that not only has the law of the sea been in large part human rights blind, but human rights law has until very recently suffered from serious sea blindness. As a result, human rights treaties have been refined through many efforts by many actors mainly for a land context and not for the sea. Human rights lawyers only started looking into that recently. The first NGO that uniquely but comprehensively deals with rights of persons in the maritime context is the UK-based charity Human Rights At Sea, which was only established in 2014, whereas for the land context there are hundreds of NGOs.

I have a last point on the problem of flags of convenience and the rights of persons of sea, notably seafarers. Traditionally, human rights only bind the state, but in recent years the concept of business and human rights

has gained ground. You may know the UN Guiding Principles on Business and Human Rights. They set out that business entities should respect human rights, which would mean that shipowners had to ensure the rights of seafarers, for example. The problem, again, is enforcement and the problem of flags of convenience. Differently from a business entity operating on land, a business entity operating at sea can, through the choice of the flag, choose the law and the courts, so to speak. Many have chosen a flag of convenience, where there is a lax enforcement standard, and the domestic policing and courts system is not really fit for purpose to address human rights abuses taking place aboard ships.

One idea is to supplement the failing domestic courts system with a private justice system, which could be arbitration. Arbitration is after all a judicial system without a country. The idea is not that far-fetched. In December 2019, The Hague Rules on Business and Human Rights Arbitration were published. The idea is that an international private judicial dispute resolution mechanism is created that parties involved in business and human rights disputes can use. A maritime tailored arbitration scheme could be a partial solution to the lack of remedies in flags of convenience. The UK-based charity Human Rights At Sea, which I mentioned, launched that idea and is currently working towards such a maritime tailored arbitration scheme.

Another measure could be to better streamline human rights into the work of international organisations. Monitoring bodies, treaty bodies and the Human Rights Council primarily focus their attention on states' human rights performance on dry land, and a comprehensive and systematic scrutiny of human rights abuses at sea does not really take place. There is a whole raft of measures that should and could be taken to establish the concept of human rights at sea to ensure that human rights are taken as seriously at sea as they are taken on land.

Lord Alton of Liverpool: Thank you.

The Chair: The final set of questions in this session is from Baroness Rawlings.

Q83 **Baroness Rawlings:** My questions very much follow on from Lord Alton's. What are the key issues that you think the United Kingdom Government should focus on in the international law of the sea? Which issues do you think are the most important immediate problems—for example, drugs, firearms and migrants—or should we be looking more at long-term problems of climate change because one really cannot do everything? Where do you think UK involvement must have the most significant impact?

Professor Anna Petrig: We have explored various topics today, and some of them are interrelated: new technologies, exclusive flag state jurisdiction, human rights and climate change. There is growing awareness and consensus in all four areas that the law must evolve. With regard to some, concrete efforts are under way where the UK is already active or could take a lead.

In terms of priorities, that is a difficult question, but climate change is one of the major concerns because it really affects every country and every person in one way or another. Human rights at sea are transversal, and not limited to one type of profession or one type of person. It is certainly an area where many can benefit through development of the law and through the establishment of good practices. Maybe one issue is autonomous ships. That is a technology that is not of passing interest. It will not go away.

Today, it is not a question of whether autonomous ships will come but rather how quickly, how they will be designed and what tasks they can carry out. It is unique that the IMO takes a proactive stance. Usually, you would adopt a treaty or amend a treaty after a major incident or a catastrophe, but here we have the chance to proactively regulate. They are not minor issues. I highlighted the flag of convenience problem. If you can avoid the same problems for autonomous ships as we have for traditional ships, that could be quite a gain.

The Chair: Thank you.

Professor Douglas Guilfoyle: I agree with the premise of the question that one cannot do everything, and that even very significant states with a long history in maritime affairs have to choose perhaps a limited number of things to do well. When I reflect on it, the question becomes what unique leverage does the UK have to make a difference in maritime affairs? As a hub for international trade and finance, there is a lot one could do perhaps to target the actors behind bad practices rather than the bad practices themselves through financial mechanisms such as the Magnitsky Act. That would be one thing.

Building on Professor Petrig's point about climate change, the UK is an original signatory to the new Clydebank Declaration, which was one of the outcomes of COP 26, on the creation of green shipping corridors. That declaration notes that international shipping emissions are expected to represent between 90% and 130% of 2008-level emissions by 2050. Getting emissions in shipping under control has been a huge challenge. The IMO has been active in that space for a while, but, none the less, Clydebank Declaration signatories, including the UK, could work more with the IMO and beyond to raise ambition in that field and consider how to give regulatory standards around shipping emissions real teeth, whether that be through port state measures—the type I outlined to do with fisheries—or through other trade and finance-related measures. It is a question of getting beyond the silos and seeing tools in other branches of the law that can be brought to bear on these questions. Thank you very much for the opportunity.

The Chair: Thank you both very much for contributing your expertise today. Some of the ground was familiar, but you have added special insight into those issues. Certainly, I will go away thinking about autonomous vehicles being at the horseless carriage stage. That makes one even more concerned about what it might be like for the next generation. Thank you very much indeed. At this stage, in formally thanking you, I briefly suspend the sitting. Thank you.