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Defence Committee

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UNCLOS: the law of the sea in the 21st century

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Evidence is published online at <https://committees.parliament.uk/work/1557/unclos-fit-for-purpose-in-the-21st-century/> and available for inspection at the Parliamentary Archives (020 7219 3074).

Q in footnotes refers to a question in oral evidence.

SUMMARY

Forty years ago, states came together at the United Nations to agree an ambitious and comprehensive framework for the governance of the world's oceans and seas. The negotiation and ratification of the United Nations Convention on the Law of the Sea (UNCLOS) was a considerable achievement. It secured 168 signatories including the European Union, thus demonstrating its widespread support.

The key achievements of UNCLOS were to standardise states' claims to maritime zones and the resources within them, and provide states with mechanisms for settling disputes when they arise. The fact that most maritime boundaries have been agreed by neighbouring states and there have been few formal disputes is testament to the widespread support for UNCLOS by states.

Our inquiry set out to determine whether UNCLOS remains fit for purpose forty years after its agreement. We heard praise for the Convention because of its 'framework' nature, which allows for the development of more detailed regulation and guidance to be delegated to other international bodies such as the International Maritime Organization. This means that UNCLOS has been considered a 'living treaty', which can change to reflect modern circumstances. This is now being tested by new concerns and new uses of the sea.

There was very limited appetite for any attempt to renegotiate UNCLOS, not least because this would risk diluting or losing provisions which are vital to the interests of the UK and its likeminded partners.

UNCLOS is not perfect, however, and the evidence we received suggests that if UNCLOS is not supplemented, nor its provisions further developed, it will no longer be fit for purpose in the 21st century.

The provisions of UNCLOS are not always complied with in practice, despite its adoption by most states. An overarching challenge is that of enforcement. This is a "weak point" of all international law, and is even more challenging in the maritime domain because the law of the sea insists upon the two central principles of the freedom of the high seas and the exclusive jurisdiction of the flag state. On the high seas, the area covering most of the world's oceans, only the flag state has jurisdiction over vessels, except in very limited circumstances. In practice, however, the extensive use of 'flags of convenience' (states with limited domestic regulation, enforcement capacity and few criteria for registration) has led to a "jurisdictional vacuum" on the high seas. We call on the Government to commit to tackling this problem, which has significant implications for maritime security and the protection of human rights at sea.

There are also gaps in UNCLOS. In some cases, this is because issues such as climate change and rising seas levels were not well understood, or new technologies such as maritime autonomous vehicles were only developed after UNCLOS was drafted. Other issues have intensified since UNCLOS was drafted and its provisions are no longer adequate to address them. These include human rights at sea, labour protections, maritime security, and the regulation of access to certain economic resources, such as those on the deep seabed which have only recently become accessible due to new technologies.

We identify several areas in which action by the UK Government could have a significant and positive impact on the effective international governance of the sea.

First, the Government must work more closely with likeminded partners, via the International Maritime Organization and other international bodies, to address some of the regulatory gaps in the law of the sea. This will be particularly important for the development of regulations governing the use of maritime autonomous vehicles. As a leading developer of autonomous technologies, the UK must engage closely with the IMO to develop guidance and, in the meantime, act as an example to other states through its own practice.

Second, where there is a need for more extensive supplementation of UNCLOS, the Government should work with likeminded partners to advance new international agreements. We urge the Government to consider advancing an agreement to address human rights abuses at sea. Such an agreement must take a holistic approach to human rights. The Government will therefore need to widen its focus to issues beyond labour protection and encompass matters such as physical and sexual crimes committed at sea and mass migration by sea. In exploring such an agreement, it should investigate mechanisms including port state controls, sanctions and mechanisms by which individual victims can bring human rights abusers to justice.

The negotiation of new agreements will require the UK to engage more closely with other parties to UNCLOS. The UK should reconsider its current position that the meetings of the States Parties to UNCLOS do not provide an appropriate forum to discuss matters of substance. This will also be important for ensuring agreement on the interpretation of UNCLOS in light of circumstances not envisaged when it was drafted. A clear example of where state agreement on the interpretation of UNCLOS is urgently needed is the question of whether baselines (and associated maritime entitlements) should be fixed in response to rising sea levels. The UK could play a key role in advocating and facilitating such agreement. This will be vital not only to provide certainty for small island states which face an existential threat from sea level rise, but also for the UK and its Overseas Territories.

Third, the Government must do more to uphold actively the key principles of UNCLOS, and encourage other states to do the same. We heard encouraging evidence that the UK is already doing this. For example, by the Royal Navy's application of the 'principle of equivalence' to maritime autonomous vehicles which ensures that the use of these new technologies upholds the core principles of UNCLOS, and through its efforts to uphold the right to innocent passage by undertaking freedom of navigation operations in the South China Sea and around the Crimean Peninsula.

In other areas, however, the Government is falling short. It is not clear, for example, why the Government has not signed the 1986 UN Convention on Conditions for Registration of Ships. Action by the UK to sign the Convention would strengthen the requirement for ships to have a genuine link with a flag state and help to mitigate the maritime security and human rights concerns relating to flags of convenience. The Government should also tighten the UK's own conditions of ship registry to act as an example internationally.

The Government must carefully consider whether proposed domestic legislation is in compliance with UNCLOS, in particular the Nationality and Borders Bill. We heard significant concern that its so-called 'turnaround' policy for maritime migration may contravene the 'duty to render assistance' provided for in Article 98 of UNCLOS. The form in which the Bill reached the House of Lords risks undermining the perception that the UK is a strong proponent of the rules based international order.

The Government must also ensure it actively supports developing states through capacity building and resourcing so they too can uphold the principles of UNCLOS through law enforcement and environmental protection activities.

Fourth, the Government must continue to advocate for the protection of the marine environment, and promote a more careful approach to the extraction of living and non-living resources. We were pleased to hear that the Government is advocating for an ambitious agreement on Biodiversity in Areas Beyond National Jurisdiction. We encourage the Government to take a similar stance towards the protection of non-living resources on the deep seabed. Pressure from other states means that the International Seabed Authority may be rushed in the development of regulations for deep seabed mining. It is therefore vital for the UK to engage actively in international discussions to ensure environmental protection is prioritised. The Government should also push for greater coordination between UNCLOS and United Nations Framework Convention on Climate Change (UNFCCC) processes on the issue of land-based sources of pollution, including greenhouse gas emissions.

As a major maritime power, the UK has a strong role to play in the development and maintenance of the law of the sea. It must, along with its partners and allies, step up to meet the 21st century challenges to UNCLOS, to ensure its continued relevance and utility for at least another 40 years.

UNCLOS: the law of the sea in the 21st century

CHAPTER 1: INTRODUCTION

1. Around 71 per cent of the Earth's surface is covered with water, with more than 96 per cent held in oceans. 80 per cent of the volume of international trade in goods is carried by sea, and at any one time there are more than 30 million people at sea.¹
2. This year marks the 40th anniversary of the signing of the United Nations Convention on the Law of the Sea (UNCLOS). Commonly referred to as the 'constitution of the oceans', UNCLOS is one of the most widely ratified treaties, with 168 signatories including the United Kingdom and European Union. It sought to provide comprehensive governance of the world's oceans and seas.

The development of UNCLOS

3. Before UNCLOS, the oceans were largely governed by the 17th century concept of the 'freedom of the seas'. Coastal states had rights over a narrow band of territorial sea adjacent to their land, roughly equivalent to the distance a cannonball could be fired from the shore (hence the original territorial sea limit of three nautical miles), but all waters beyond this were considered international waters and all states could use and traverse them freely.
4. In the 20th century, states began to extend their jurisdiction over the sea. Some states, including the United States, Chile, Peru and Ecuador, extended their control to 200 nautical miles; others extended it to 12 nautical miles.
5. In the 1950s, negotiations began at the United Nations to try to standardise these claims. Professor Robin Churchill, Emeritus Professor of International Law at the University of Dundee, and Dr Jacques Hartmann, Reader in International Law at the University of Dundee, told us that the first United Nations Conference on the Law of the Sea, which began in 1956, was "unsuccessful in dealing with maritime zones" and "led to fears that technologically advanced States would arrogate large areas of the seabed to themselves."² The lack of standardised maritime entitlements led to disputes, including the UK-Iceland 'cod wars' between 1958 and 1976. Further conferences followed, and in 1982 UNCLOS was agreed, bringing an end to the "chaotic situation" in the post-war period.³ Box 1 shows a timeline of the development of UNCLOS.

1 Written evidence from Professor Steven Haines ([UNC0037](#))

2 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#))

3 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#)). See also written evidence from Dr Montserrat Gorina-Ysern ([UNC0020](#)).

Box 1: Timeline of the development of UNCLOS

- 1956: The first United Nations Conference on the Law of the Sea begins in Geneva.
- 1958: The first Conference concludes, and results in four treaties:
 - (1) Convention on the Territorial Sea and Contiguous Zone (entry into force: 10 September 1964)
 - (2) Convention on the Continental Shelf (entry into force: 10 June 1964)
 - (3) Convention on the High Seas (entry into force: 30 September 1962)
 - (4) Convention on Fishing and Conservation of Living Resources of the High Seas (entry into force: 20 March 1966)
- 1960: The second United Nations Conference on the Law of the Sea is held in Geneva, but does not result in any new agreements.
- 1973: The third United Nations Conference on the Law of the Sea begins in New York, with 160 countries participating.
- 1982: The third Conference concludes and results in a new treaty: the United Nations Convention on the Law of the Sea (UNCLOS). This replaces the previous four conventions.
- 1994: An implementing agreement to Part XI of UNCLOS, which considers the management of the deep seabed, is adopted. As a result, UNCLOS receives the requisite number (60) of signatories to enter into force.
- 1995: An implementing agreement on managing and conserving fish stocks is adopted, commonly referred to as the UN Fish Stocks Agreement. It enters into force in 2001.
- 2018: Negotiations begin for a third implementing agreement on marine biodiversity in areas beyond national jurisdiction. These negotiations have yet to conclude.

6. UNCLOS has been signed by 167 states and the European Union. Non-signatories include Kazakhstan, Peru, Turkey, Turkmenistan, Uzbekistan and the United States. We heard that non-signatories are still bound by many of the provisions of UNCLOS, as they are now generally accepted as reflecting customary international law, to which all states must adhere.⁴

The structure of UNCLOS

7. Negotiations adopted a ‘package deal’ approach, according to which trade-offs were made between state delegations with the aim of achieving consensus and comprehensive coverage of key issues.
8. UNCLOS is a framework convention. This means that it sets out broad commitments and principles for parties, but leaves the setting of some specific commitments to subsequent international treaties or national legislation. For this reason, it is often referred to as the ‘constitution of the

oceans'.⁵ Professor James Harrison, Professor of Environmental Law at the Edinburgh Law School, explained:

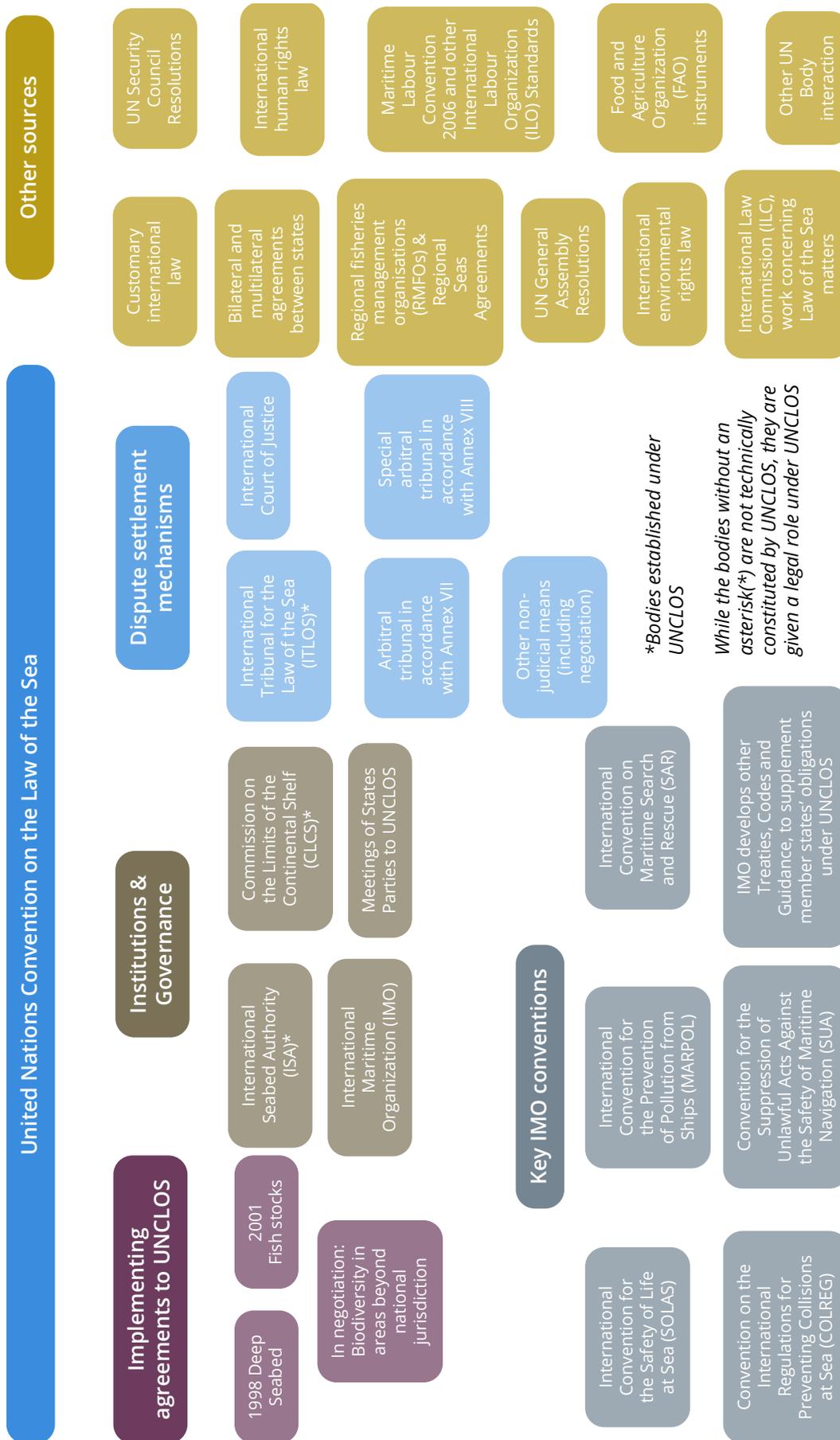
“UNCLOS has been described as an ‘umbrella’ convention, in the sense that it sets out the basic framework for states to exercise jurisdiction over most activities at sea, but it does not contain the detailed rules to govern those activities. Indeed, UNCLOS expressly calls for the negotiation of additional instruments through other international institutions to give effect to its provisions, particularly when it comes to fisheries, the protection of the marine environment and deep seabed mining.”⁶

9. UNCLOS refers to these international institutions as ‘competent international organizations’, and includes provisions for them to develop standards, regulations and treaties in specific areas. Figure 1 shows how some of these key organisations and treaties fit together under the UNCLOS umbrella. Three institutions—the International Seabed Authority, the Commission on the Limits of the Continental Shelf, and the International Tribunal on the Law of the Sea—were directly established by UNCLOS or its implementing agreements. Others existed prior to UNCLOS, or were established separately, but continue to play a role in developing the law of the sea.
10. An important competent organization is the International Maritime Organization (IMO), headquartered in London, which is tasked with developing rules and standards on shipping under UNCLOS. The history and role of the IMO is discussed further in Box 2.

5 [Q 78](#) (Professor Douglas Guilfoyle)

6 Written evidence from Professor James Harrison ([UNC0010](#))

Figure 1: Schematic showing how relevant international organisations and treaties relate to UNCLOS



Box 2: The International Maritime Organization

The IMO was formally established in 1948 at a UN conference in Geneva. Until 1982 it was known as the Inter-Governmental Maritime Consultative Organization. The IMO Convention entered into force in 1958. The organisation's purpose was to "provide machinery for cooperation among Governments in the field of governmental regulation and practices relating to technical matters of all kinds affecting shipping engaged in international trade; to encourage and facilitate the general adoption of the highest practicable standards in matters concerning maritime safety, efficiency of navigation and prevention and control of marine pollution from ships".⁷

The IMO develops international law in two ways. It can amend existing agreements, including those that had been developed before its establishment, or it can convene a conference to negotiate new conventions.⁸ To streamline the process for the former, it introduced a 'tacit acceptance' procedure, which means that an updated agreement will enter into force unless a specified number of states object to it before a certain date.⁹ This has proved to be effective.¹⁰ Proposals for new conventions or updates to existing ones can come from member states, the UN or its agencies, or intergovernmental bodies.¹¹

An example of a convention the IMO has updated is the International Convention for the Safety of Life at Sea (SOLAS), which sets out minimum standards for the construction, equipment and operation of ships.¹² The first version of SOLAS was adopted in 1914 after the Titanic disaster. It was then updated in 1929 and 1948, before the IMO updated it in 1960. Several further amendments have been made since.

Other conventions adopted by the IMO include the International Convention for the Prevention of Pollution from Ships (MARPOL) in 1973 (updated via a Protocol in 1978), the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) in 1978 (updated in 1995 and 2010) and the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (SUA) in 1988 (updated via a Protocol in 2005).

175 states are party to the IMO. Professor Barnes, Professor of International Law at the University of Lincoln, told us that IMO agreements are "generally very well ratified and participated in by states" and that for some agreements, such as SOLAS and MARPOL, the level of ratification "represents about 95 per cent of world tonnage".¹³

Key provisions

11. UNCLOS contains over 300 Articles, grouped into 17 Parts, and has nine Annexes. Its provisions concern a range of matters, from the right to conduct marine scientific research to the definition of warships. Two important sets of provisions relate to maritime zones and boundaries, and dispute settlement mechanisms.

7 International Maritime Organization, 'Brief History of IMO': <https://www.imo.org/en/About/HistoryOfIMO/Pages/Default.aspx> [accessed 7 February 2022]

8 Q 84 (Professor Richard Barnes)

9 *Ibid.*

10 Written evidence from Professor Richard Barnes and Professor Elizabeth Kirk (UNC0015)

11 Q 84 (Professor Richard Barnes)

12 International Maritime Organization, 'International Convention for the Safety of Life at Sea (SOLAS, 1974)': [https://www.imo.org/en/About/Conventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-\(SOLAS\),-1974.aspx](https://www.imo.org/en/About/Conventions/Pages/International-Convention-for-the-Safety-of-Life-at-Sea-(SOLAS),-1974.aspx) [accessed 7 February 2022]

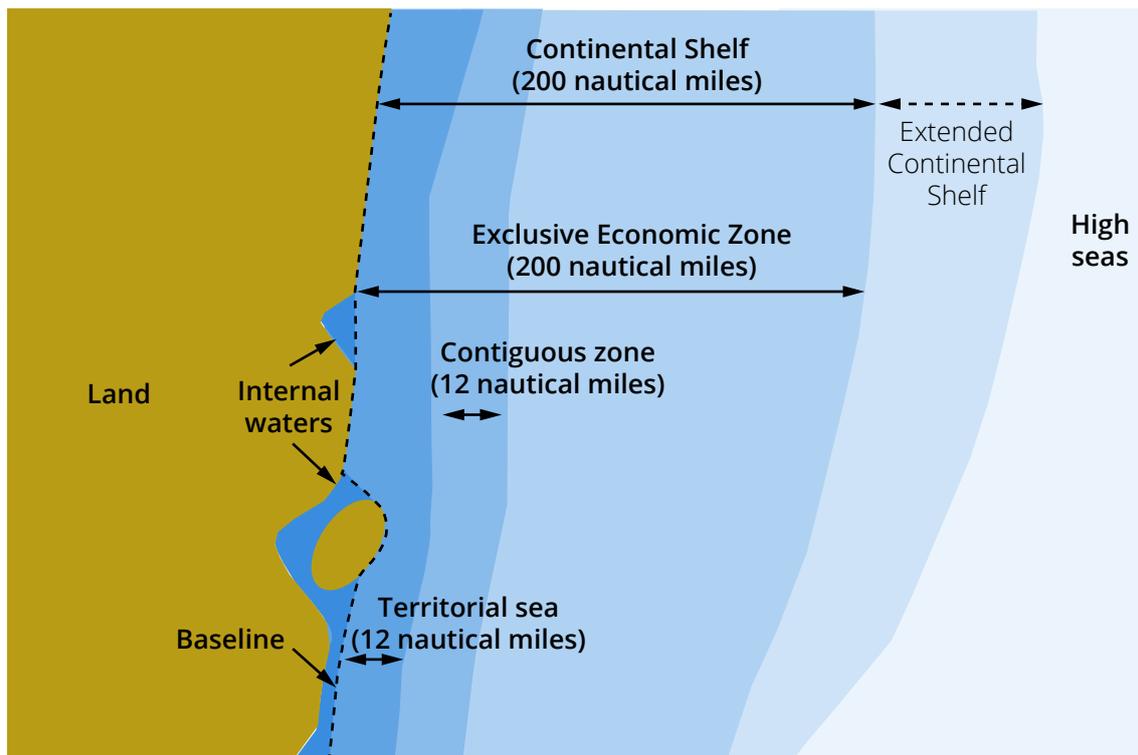
13 Q 85 (Professor Richard Barnes)

Maritime zones and boundaries

12. UNCLOS clarified the breadth of the territorial sea, defined other maritime zones, and provided a new zone, putting an end to the “chaotic situation” in the first half of the 20th century.¹⁴ Maritime zones are generated by the coastal state’s territory (this includes, islands, rocks and low-tide elevations located within the state’s territorial sea). The breadth of maritime zones is measured from baselines drawn along the coast—UNCLOS provides the rules for these too. Where geographic circumstances mean that states’ maritime claims overlap, boundaries must be ‘delimited’. The affected states must try to come to an agreement between themselves first, but if they cannot, maritime boundary disputes can be resolved via judicial and non-judicial means, as laid out in UNCLOS.
13. The main maritime zones defined by UNCLOS are shown in Figure 2 and include:
 - Internal waters: this includes the sea area landward of baselines in which the coastal state exercises sovereignty and where certain rights, such as the freedom of navigation, do not apply.
 - Territorial sea: this extends to 12 nautical miles from the baseline. This area is under the jurisdiction of the state, but foreign vessels have the right to navigate through it (known as ‘innocent passage’).¹⁵
 - Contiguous zone: this extends a further 12 nautical miles beyond the territorial sea. The state can enforce its laws on some specific matters (customs, taxation, immigration and pollution).
 - Exclusive economic zone (EEZ): this extends 200 nautical miles from the baseline. The state has exclusive rights over natural resources.
 - Continental shelf: a 200 nautical mile zone from the baseline where coastal states have the exclusive right to explore and exploit the resources of the seabed and subsoil. If the continental margin extends further than 200 nautical miles, the coastal state may be entitled to an extended continental shelf.
 - The high seas: all parts of the sea that are not included in an EEZ, territorial sea, or internal or archipelagic waters of a state. They are open to all states, and states enjoy freedoms including the freedom of navigation, freedom of overflight, and freedom to lay submarine cables. No part of the high seas can be subject to claims of sovereignty.
 - The ‘Area’: the seabed beyond the continental shelf. It is governed by the principle of the ‘common heritage of mankind’, according to which activities in the Area shall be carried out for the benefit of mankind as a whole. The International Seabed Authority was established in 1994 to provide for the equitable sharing of financial and other economic benefits derived from activities in the Area.

14 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#))

15 All waters beyond the territorial seas are informally known as ‘international waters’, although this is not a defined term in UNCLOS. ‘International waters’ is a broader term than ‘the high seas’, as it includes contiguous zones and EEZs.

Figure 2: The main maritime zones defined by UNCLOS

Dispute settlement mechanisms

14. Part XV of UNCLOS provides states with four different fora to settle their disputes:
 - The International Tribunal of the Law of the Sea (established by UNCLOS)
 - The International Court of Justice
 - An Arbitral Tribunal in accordance with Annex VII of UNCLOS
 - A Special Arbitral Tribunal in accordance with Annex VIII of UNCLOS
15. States can also choose to settle disputes by other, non-judicial means, such as negotiation and regional agreements. Professor Edwin Egede, Professor of International Law and International Relations at the Cardiff University School of Law and Politics, told us that this range of options “provides ... essential flexibility, encouraging states parties to seek peaceful resolution of conflicts rather than resorting to the use of force as an option.”¹⁶
16. Dispute settlement under UNCLOS is compulsory for signatories. Professor Douglas Guilfoyle, Associate Professor of International and Security Law at the University of New South Wales in Canberra, and Professor Natalie Klein, Professor at the Faculty of Law of the University of New South Wales in Sydney, told us that this was seen by many states as “providing a useful brake on the possibility of fragmented and diverse interpretations of the Convention’s provisions.”¹⁷ Professor Richard Barnes, Professor of International Law at the University of Lincoln, explained that it was also

16 Written evidence from Professor Edwin Egede ([UNC0006](#))

17 Written evidence from Professor Douglas Guilfoyle and Professor Natalie Klein ([UNC0001](#))

intended to “help less powerful states defend their legal interests against more powerful states” (though he added there is “very little evidence at the moment that states are using litigation to protect their interests in that way”).¹⁸

17. The compulsory nature of dispute settlement also reinforces compliance with UNCLOS. Professors Guilfoyle and Klein noted that it is likely that the threat of compulsory dispute settlement “moderates state decision-making and behaviour”.¹⁹

Our inquiry

18. In this inquiry we set out to determine whether UNCLOS remains fit for purpose—both for the international community and the UK—40 years after its negotiation. Our evidence was unequivocal in its praise for the many achievements of UNCLOS, and it is clear that the core tenets of the Convention remain as relevant today as they were 40 years ago.
19. Nevertheless, challenges that were not envisaged at the time of its negotiation, including rising sea levels and autonomous maritime vehicles, have brought UNCLOS, and its related treaties and institutions, into renewed focus. Other issues, including maritime security, human rights abuses at sea, biodiversity loss and environmental degradation have intensified, but it is not certain that UNCLOS and its related instruments provide all the tools necessary to address them. These challenges, and recommendations for how the UK can contribute to their solutions, will be the focus of this report.

This report

20. In Chapter 2 we evaluate the general achievements and weaknesses of UNCLOS, before outlining the mechanisms by which it could be updated or amended. In the remaining chapters we assess the extent to which UNCLOS is able to deal with five key challenges arising or intensifying in the 21st century. Chapter 3 addresses maritime security, Chapter 4 addresses climate change and the environment, Chapter 5 addresses human rights and labour protection at sea, Chapter 6 addresses maritime autonomous vehicles and Chapter 7 addresses the regulation of access to economic resources. In each chapter we discuss potential solutions to each of these challenges.
21. We thank our Specialist Adviser, Dr Reece Lewis, for his advice and expertise throughout this inquiry, and all our witnesses.

18 [Q 86](#) (Professor Richard Barnes)

19 Written evidence from Professor Douglas Guilfoyle and Professor Natalie Klein ([UNC0001](#))

CHAPTER 2: EVALUATING UNCLOS

Achievements and strengths

22. Witnesses agreed that the successful negotiation and entry into force of UNCLOS was a considerable achievement. Professor Sir Malcolm Evans, Professor of Public International Law at the University of Bristol told us:

“Possibly [UNCLOS’s] greatest achievement is that it is there ... It was by no means a given that there would be a satisfactory outcome to what was a very long and protracted negotiation that attempted to do what, frankly, had never been done successfully before and has never been attempted since: to get all states of the world together around a table to produce a holistic, integrated convention that addressed virtually all the relevant issues at that time in a package-deal convention.”²⁰

23. Professor Harrison said that the successful negotiation of UNCLOS was in part due to an emphasis on consensus decision making, and that “the need to maintain that consensus has been a key driver in developments in the law of the sea since the Convention was concluded.”²¹ Professor Egede agreed, noting a key reason for UNCLOS’s success was the “open-handed negotiations” at the third UN Conference on the Law of the Sea, which brought together “numerous developed and developing states, as well as a large number of non-state actors with various expertise relating to the law of the sea”.²²

24. This emphasis on consensus has led to the widespread adoption of UNCLOS. Professor Churchill and Dr Hartmann noted that was not the case with the earlier Geneva Conventions, which were ratified by fewer than half of then-existing states.²³ In turn, the widespread ratification of UNCLOS has ensured that many of its provisions reflect customary international law and are therefore binding on all states.²⁴

25. We also heard that the framework nature of UNCLOS is a key strength. By delegating the development of specific regulations to competent organizations, it provides a basis for international law to develop over time without the need to amend UNCLOS itself.²⁵ Sir Michael Wood told us that: “It is having regard to this potential flexibility that UNCLOS has sometimes been referred to as a ‘living treaty’.”²⁶

26. The Foreign, Commonwealth and Development Office (FCDO) told us that “UNCLOS is a major achievement of diplomacy and international law making” and that the UK has benefitted from UNCLOS in “many ways”:

“Relying on the rules provided for in UNCLOS, the UK has agreed most of its maritime boundaries with neighbouring States. This provides clarity to the UK and other countries on the limits of our maritime zones and accompanying rights and duties as a coastal state.

20 [Q 10](#) (Professor Sir Malcolm Evans). See also written evidence from Professor Edwin Egede ([UNC0006](#)) and Professor James Harrison ([UNC0010](#)).

21 Written evidence from Professor James Harrison ([UNC0010](#))

22 Written evidence from Professor Edwin Egede ([UNC0006](#))

23 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#))

24 See for example [Q 19](#) (Professor Sir Malcolm Evans).

25 [Q 78](#) (Professor Douglas Guilfoyle)

26 Written evidence from Sir Michael Wood ([UNC0009](#))

It also provides a legal framework to cooperate with our neighbours on resource management, scientific inquiry, tackling crime and protecting the environment. UNCLOS freedoms have enabled us to trade freely with many other countries and conduct marine scientific research around the globe.”²⁷

27. The vast majority of witnesses considered that UNCLOS remains an important treaty, with widespread support from states, and there was agreement that it should not be renegotiated (see paragraph 42 for further discussion).²⁸
28. Witnesses were also keen to stress the importance of viewing UNCLOS as an umbrella of related treaties and organisations, rather than a stand-alone treaty.²⁹ Vaughan Lowe QC from Essex Court Chambers told us that UNCLOS’s purpose is to “establish the legal framework within which maritime activities take place” and “not to establish a detailed substantive regime governing the actual exercise of those activities.”³⁰

Weaknesses and gaps

29. But there was widespread acknowledgement that some issues are not fully addressed in UNCLOS or under its umbrella. These include recent challenges and developments in maritime security (which is not defined in UNCLOS), biodiversity loss and environmental degradation, human rights and labour protections, and the regulation of access to economic resources, including on the seabed and in the water above it (the ‘water column’). There are also issues that were not yet a factor at the time of UNCLOS’s negotiation, including climate change and new technologies such as autonomous maritime vehicles. These issues are considered in the remaining chapters of the report.

Compliance and enforcement

30. An overarching issue discussed throughout our inquiry was that of compliance with and enforcement of the provisions of UNCLOS. Sir Michael told us that in general, “there is a high degree of compliance with the rules set forth in UNCLOS”.³¹ However we heard that when there are breaches, enforcement is a challenge due to the nature of international law. According to Professor Andrew Serdy, Professor of Public International Law and Ocean Governance at the University of Southampton, enforcement is a “weak point of all international law ... which is marked by the absence of an international equivalent of a police force and the jurisdiction of international courts and tribunals being ultimately always founded on consent”.³² Professors Guilfoyle and Klein agreed, noting that “at the international level, constructing direct enforcement mechanisms is difficult.”³³
31. If the dispute is at the state level, states can use one of the dispute settlement mechanisms outlined in paragraph 14. Professors Guilfoyle and Klein told us that “on many matters the dispute settlement system routinely works”

27 Written evidence from the FCDO ([UNC0028](#))

28 See for example [Q 38](#) (Cdr Caroline Tuckett) and written evidence from Vaughan Lowe QC ([UNC0046](#)).

29 See for example written evidence from Professor James Harrison ([UNC0010](#)).

30 Written evidence from Vaughan Lowe QC ([UNC0046](#)). See also written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#)).

31 Written evidence from Sir Michael Wood ([UNC0011](#))

32 Written evidence from Professor Andrew Serdy ([UNC0004](#))

33 Written evidence from Professor Douglas Guilfoyle and Professor Natalie Klein ([UNC0001](#))

and “the great majority of maritime boundary awards are complied with”.³⁴ Professor Serdy noted that the low number of disputes since UNCLOS entered into force suggests that its rules are “for the most part clear and realistic enough not to generate disputes at all”.³⁵

32. Professor Barnes also noted that the framework nature of UNCLOS means that “not all disputes have to be settled”; they can instead be “managed”, for example by “interim arrangements whereby states agree not to engage in certain activities”. He told us that “as long as the dispute itself is not blowing out of all proportion” states may decide they do not need to use the dispute settlement mechanisms.³⁶
33. But there have been occasions where states have refused to engage in the arbitration process or follow the resulting judgment or award. In 2013, the Philippines brought a case against China over its activities in the South China Sea. The case was heard by an Arbitral Tribunal under Annex VII of UNCLOS and in 2016 it ruled in favour of the Philippines. China, despite being a signatory to UNCLOS, did not engage with the proceedings and has not accepted the ruling. Professor Harrison said that refusal by states to engage undermines the dispute settlement process and “directly threaten[s] the ability of UNCLOS to provide a stable legal framework for the oceans”.³⁷
34. We heard of an increasing trend towards using UNCLOS arbitration processes for issues which are potentially outside of the scope of the Convention. Professor Harrison gave the example of the 2015 Chagos Marine Protected Area Arbitration, where Mauritius initiated proceedings against the UK over its establishment of a Marine Protected Area (MPA) around the Chagos archipelago.³⁸ The Tribunal found that the UK had “failed to comply with its UNCLOS obligations” by not consulting Mauritius before declaring the MPA. However, Professor Harrison thought that this finding was based on a:

“broad reading of Article 2(3) of the Convention, which potentially allows disputes about other international rules to be determined through UNCLOS dispute settlement procedures if they related to maritime boundaries, even if states have not otherwise agreed to the settlement of disputes concerning those rules.”

He thought that such cases “raise serious questions about the scope of jurisdiction under the compulsory system of dispute settlement established by UNCLOS” and that a drawback of this “expansive view” is that states may become increasingly cautious about accepting compulsory jurisdiction clauses in international conventions.³⁹
35. We heard that the range of fora in which states can choose to settle disputes may also lead to “forum shopping” in order to secure the desired

34 Written evidence from Professor Douglas Guilfoyle and Professor Natalie Klein ([UNC0001](#))

35 Written evidence from Professor Andrew Serdy ([UNC0004](#))

36 [Q 86](#) (Professor Richard Barnes). See also written evidence from Professor James Harrison ([UN0010](#)).

37 Written evidence from Professor James Harrison ([UNC0010](#))

38 Permanent Court of Arbitration, ‘Chagos Marine Protected Area Arbitration (*Mauritius v. United Kingdom*)’: <https://pca-cpa.org/en/cases/11/> [accessed 7 February 2022]

39 Written evidence from Professor James Harrison ([UNC0010](#)). In his evidence, Professor Harrison quoted the following article: Alan Boyle and James Harrison, ‘Judicial Settlement of International Environmental Disputes: Current Problems’, *Journal of International Dispute Settlement* vol. 4(2), (2013), pp 245–276: <https://academic.oup.com/jids/article-abstract/4/2/245/993289> [accessed 7 February 2022]

judgment. Dr Masimo Lando, Assistant Professor at the School of Law at the City University of Hong Kong, and Dr Niccolò Ridi, Lecturer in Public International Law at King's College London's Dickson Poon School of Law, told us that this can lead to “conflicting decisions” which in turn might lead to “a progression ‘fragmentation’ of international law”.⁴⁰

36. The formal dispute settlement mechanisms provided for in UNCLOS are also not applicable to breaches of law carried out by non-state actors (which we heard constitute the majority of breaches)⁴¹ or which affect non-state actors. In such instances, UNCLOS and its related treaties rely on direct enforcement by individual states, depending on where the breach took place.
37. This poses a particular problem on the high seas, which are beyond the direct jurisdiction of any state. UNCLOS attempts to address this by giving flag states (the state where a vessel is registered) jurisdiction over ships flying its flag in the high seas. This is known as ‘exclusive flag state jurisdiction’. The flag state alone has jurisdiction over the vessel (apart from in certain, exceptional circumstances, including the right of visit in Article 110⁴²) and is responsible for enforcing international laws and regulations, such as those set out by the International Maritime Organization and the International Labour Organization.
38. Flag states have a number of obligations, as set out in Article 94 of UNCLOS. These include a duty to ensure the effective exercise of its jurisdiction relating to, for instance, administrative, technical and social matters including labour conditions, ensuring safety at sea and the seaworthiness of the vessel.
39. In practice, however, abuses of the system have compounded the problem of enforcement on the high seas and led to what Professor Anna Petrig, Chair of International Law and Public Law at the University of Basel, termed a “jurisdictional vacuum”.⁴³ This is because a proportion of ships are registered with ‘flags of convenience’—states with limited domestic regulation in areas such as pollution, labour protection, and taxation, and which have ‘open registries’, allowing foreign vessels to use their flag with few conditions. Examples of flags of convenience include Panama, Liberia, and the Marshall Islands, which together represent the top three flag states by gross tonnage (see Table 1).⁴⁴ Professor Evans told us this has led to a situation where it is easy to register a vessel in a country “that will not take its obligations as a flag state seriously” and which “have no meaningful capacity” to enforce regulations on the high seas.⁴⁵

40 Written evidence from Massimo Lando and Niccolò Ridi ([UNC0041](#))

41 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#))

42 [Q 38](#) (Cdr Caroline Tuckett). Article 110 of UNCLOS states that a warship is “not justified in boarding” a foreign ship encountered on the high seas, unless there is “reasonable ground for suspecting” that the ship is (a) engaged in piracy; (b) engaged in the slave trade; (c) engaged in unauthorized broadcasting and the flag State of the warship has jurisdiction under article 109; (d) without nationality; or (e) of the same nationality as the warship (even if flying a foreign flag or refusing to show its flag). In these cases, the warship may “proceed to verify the ship’s right to fly its flag”, including through sending a boat and undertaking an examination of the ship.”

43 [Q 81](#) (Professor Anna Petrig)

44 As defined by the International Transport Workers’ Federation Fair Practices Committee: International Transport Workers’ Federation, ‘Flags of convenience’: <https://www.itfglobal.org/en/sector/seafarers/flags-of-convenience> [accessed 7 February 2022]

45 [Q 18](#) (Professor Sir Malcolm Evans)

Table 1: Flag states by gross tonnage as of end of year 2020 (top ten, UK and US)

Rank	Flag state	Gross tonnage (millions)
1	Panama	221.5
2	Liberia	181.5
3	Marshall Islands	161.2
4	Hong Kong	129.7
5	Singapore	87.1
6	Malta	81.0
7	China	56.7
8	Bahamas	54.0
9	Greece	37.5
10	Japan	27.8
20	United States	10.0
22	United Kingdom	8.7

Source: Department for Transport, 'Shipping fleet statistics: 2020', 10 March 2021: <https://www.gov.uk/government/statistics/shipping-fleet-statistics-2020> [accessed 7 February 2022]

40. The jurisdictional vacuum created by exclusive flag state jurisdiction and flags of convenience is a particular challenge facing maritime security and the protection of human rights at sea, and will be discussed further in Chapters 3 and 5 respectively.
41. **Enforcement is a weakness of international law, and is a particular challenge on the high seas. While UNCLOS attempts to address this via the use of flag states, issues related to enforcement capacity and the widespread use of flags of convenience has led to a jurisdictional vacuum on the high seas.**

Updating, supplementing or amending UNCLOS

42. Given the modern challenges facing UNCLOS, we asked witnesses whether it should be renegotiated. All witnesses responded that UNCLOS could not or should not be renegotiated. A key reason given was that renegotiation risks the dilution of current provisions, which could threaten the UK's interests. Professor Evans explained that states would have to make "trade-offs and concessions in all possible directions" and so it would be a "high-risk strategy."⁴⁶ Professor Irimi Papanicolopulu, Associate Professor of International Law at the University of Milano-Bicocca, and colleagues noted that renegotiation "could be used by new powers to upset the delicate balance of powers of coastal and other states reached in 1982, creating insecurity concerning the exercise of powers."⁴⁷

46 Q 18 (Professor Sir Malcolm Evans)

47 Written evidence from Professor Irimi Papanicolopulu, Andrea Longo and Daniele Mandrioli (UNC0033)

43. The Government agreed, telling us that: “Attempting to renegotiate UNCLOS ... risks undoing the careful balance struck in the existing text as well as many of the benefits we currently enjoy.”⁴⁸
44. Nevertheless, there was optimism among witnesses that UNCLOS is sufficiently flexible to allow for its enhancement in other ways. Indeed, we were told that as a framework convention, UNCLOS is designed to be adaptable to modern circumstances. Dr Sofia Galani, Assistant Professor in Public International Law at Panteion University, told us that modern challenges do not render UNCLOS “totally helpless” as “UNCLOS is a living treaty: it allows us to interpret the provisions in the light of new realities.”⁴⁹
45. There was little appetite for using UNCLOS’s formal amendment processes (provided for in Articles 312–314) to update its provisions. Professor Churchill and Dr Hartmann told us these procedures are “too cumbersome to be useful”. Hayley Keen and Charlotte Nichol told us that while Article 313 attempts to provide a ‘simplified procedure’ for amending the convention, it is not practical as it “enables a single State Party to veto a proposed amendment”.⁵⁰ They also highlighted that formal amendments are not binding on states which do not formally accept them, which “risks fragmenting adherence” to UNCLOS.⁵¹
46. Professor Serdy told us that an alternative to formal amendment of UNCLOS is to make better use of the annual meetings of States Parties to UNCLOS (SPLOS) as “many UNCLOS-related issues can be resolved by achieving agreement among its parties on the interpretation of the existing text rather than seeking to renegotiate it.”⁵² However, the current position of many states, including the UK, is that these meetings have “no authority to discuss matters of substance”.⁵³ Professor Serdy told us this is incorrect and that “there is nothing to stop the parties gathered at such meetings from discussing whatever they wish”. He recommended that the UK revises its position on the lack of authority of SPLOS.⁵⁴ The Ocean Law Specialist Group of the World Commission for Environmental Law and the International Union for Conservation of Nature also advocated for a “revitalised” SPLOS, saying that: “Regular meetings of States Parties are widely considered to be an essential tool for ‘living’ agreements, as otherwise they may become moribund and unable to adapt to changing circumstances”.⁵⁵
47. For substantial or complex issues where more formal agreement is required, witnesses advocated for implementing agreements. These are new agreements that relate to some of the existing provisions of a convention. To date there have been two implementing agreements to UNCLOS (see Box 1).
48. Witnesses noted that while implementing agreements should, theoretically, *implement* existing provisions in a treaty, in reality they can be used to modify it or change it completely. Professor Evans told us that the first implementing

48 Written evidence from the FCDO ([UNC0028](#))

49 [Q 25](#) (Dr Sofia Galani)

50 Written evidence from Hayley Keen and Charlotte Nichol ([UNC0038](#))

51 *Ibid.*

52 Written evidence from Professor Andrew Serdy ([UNC0004](#))

53 *Ibid.*

54 *Ibid.*

55 Written evidence from the Ocean Law Specialist Group, World Commission for Environmental Law and International Union for Conservation of Nature ([UNC0042](#))

agreement “threw out the existing Part XI of the convention on the deep seabed and more or less rewrote it”.⁵⁶

49. Negotiations are currently underway to agree a third implementing agreement, which would enhance the provisions in Part XII of UNCLOS on the protection of marine biodiversity in areas beyond national jurisdiction (known as the ‘BBNJ agreement’). Joanna Szuminska highlighted that in contrast to the first two implementing agreements, these new provisions would be “truly implementing” the existing provisions of UNCLOS.⁵⁷ This agreement will be discussed further in Chapter 4.
50. The provisions of UNCLOS can also be enhanced through new treaties or regulations negotiated by competent international organizations, such as the IMO, and on a bilateral or multilateral level by agreements between states.
51. Professor Klein told us that there are “many informal agreements operating as part of ocean governance”, such as the Food and Agriculture Organizations Code of Conduct for Responsible Fisheries, and the IMO Guidelines on the Treatment of Persons Rescued at Sea.⁵⁸ Benefits of informal agreements include faster negotiation, increased willingness by states to engage as there is “less concern about enforcement and legal consequences”, and the possibility for greater involvement of non-state actors. There are also disadvantages—Professor Klein notes they are “unlikely to contribute to the development of customary international law”, as they are not intended to be legally binding. They could also undermine existing, formal law, by providing lower standards.
52. There was agreement that the choice of mechanism to amend, update or supplement UNCLOS would depend on the issue under consideration. The remaining chapters of this report consider the key challenges to the provisions of UNCLOS, and recommend mechanisms which could be used to tackle them.
53. **The signing of UNCLOS in 1982 was a fundamental step forward for the governance of the oceans. It has been largely successful, and despite the shortcomings explored later in this report, any renegotiation would be dangerous. However, it is clear that in light of its gaps and modern challenges, including human rights at sea, rising sea levels, new technologies and the quest for ever more resource, its provisions need updating and supplementing. It will be important to do this in a way which does not undermine the convention.**
54. **The Government should use its influence and voice within the International Maritime Organization to explore ways it can update and amend the existing law to address concerns, including maritime autonomous vehicles and human rights at sea.**
55. **The UK should reconsider its position that annual meetings of the States Parties to UNCLOS are not an appropriate forum to discuss substantive issues. There is scope for these meetings to be used to come to agreement amongst states on the interpretation of UNCLOS’s provisions in the light of emerging challenges. To make the most of**

56 Q 18 (Professor Sir Malcolm Evans)

57 Written evidence from Joanna Szuminska (UNC0034). See also written evidence from Professor David Ong (UNC0039).

58 Written evidence from Professor Natalie Klein (UNC0047)

this, the UK must ensure it invests in preparatory diplomacy and engagement with likeminded states.

The UK's role and influence

56. We heard that the UK is an important international player in the law of the sea. Professor Steven Haines, Professor of Public International Law at the University of Greenwich, told us that the UK is one of the “top five” maritime powers and in a “very good position to lead on a number of things”.⁵⁹
57. The FCDO agreed, telling us the UK is already a key player in several matters relating to the law of the sea:
- “The UK regularly engages with a range of partners bilaterally, multilaterally and in small groups on UNCLOS issues. We hold law-of-the-sea dialogues with a number of countries. The UK has representation in all the main relevant international bodies, including the IMO, ISA, IOC and International Hydrographic Office (IHO). We are active in the annual UN General Assembly discussions on the Law of the Sea. The UK is also active in discussions on maritime security in the Security Council [and] continues to actively support the work of the IMO and is a leading voice in all discussions.”⁶⁰
58. Nevertheless, we heard there are ways the UK can increase its influence. Judge David H. Anderson, a former judge on the International Tribunal for the Law of the Sea, told us that while the UK is represented on the International Seabed Authority—one of the three international bodies created by UNCLOS—it has not had a judge on ITLOS since he retired in 2005.⁶¹ Professor Evans said that this “does not send a good signal” and suggests that the UK is “perhaps ... deprived of knowledge and of a source of understanding of the way trends develop in this area.”⁶²
59. **The UK, with its strong maritime interests and history, should take on a global leadership role in developing and enforcing the law of sea. The Government should increase its engagement with states and other actors especially in developing areas of the law of the sea, such as human rights at sea, climate change and new maritime technologies. The Government should assist initiatives that further this aim, especially those with connections to the UK.**
60. **The Government should aim to increase the presence of British judges on institutions like ITLOS, and British personnel in roles in related international institutions. This will show that the UK is committed to upholding the provisions of UNCLOS and the international rule of law.**

59 [Q 3](#) (Professor Steven Haines)

60 Written evidence from the FCDO ([UNC0028](#))

61 Written evidence from Judge David Anderson ([UNC0045](#)). See also [Q 86](#) (Professor Richard Barnes).

62 [Q 22](#) (Professor Sir Malcolm Evans)

CHAPTER 3: MARITIME SECURITY

61. Maritime security is a broad term which can mean “very different things” to different people.⁶³ Professor Klein told us that it is traditionally associated with a state’s national security, but it is now considered to be a “broader concept”, relating to “the protection of a state’s land and maritime territory and the protection of its infrastructure, economy, environment and society from certain harmful acts occurring at sea”.⁶⁴
62. The broadening of the definition of maritime security was influenced by particular events. Dr Galani said that 9/11 was a turning point, when traditional understandings of maritime security threats were expanded to include terrorism. Over time armed robbery, piracy, trafficking offences (including trafficking of drugs or people), terrorism, illegal fishing and deliberately harming the marine environment have also been included in its scope.⁶⁵
63. Technological advancements have also changed states’ perceptions of threats. These include cyber-attacks against vessels and port systems and the use of automated systems (including drones and maritime autonomous vessels) by criminal groups for illegal activities.⁶⁶
64. We heard that maritime security threats differ between countries and regions. Professor Klein told us that in Africa, for example, there is a greater focus on oil theft; in Asia on armed robbery, inter-state disputes and terrorism; in the European Union on illegal migration and the protection of underwater heritage; and in the polar regions on the consequences of melting ice.⁶⁷

Does UNCLOS help or hinder maritime security?

65. UNCLOS itself does not define maritime security. Although it refers to “security”, Dr Galani said that this mostly concerns the “traditional understanding” of maritime security and not its broader understanding.⁶⁸ Nevertheless, Professor Klein told us that UNCLOS provides a “starting point” in terms of maritime security, as it sets out the rights and responsibilities of states, “particularly the policing powers of coastal states”.⁶⁹ The provisions of UNCLOS are supplemented by other treaties focusing on transnational crime, including the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation (SUA), the United Nations Convention Against Illicit Traffic in Narcotic Drugs and Psychotropic Substances, and the 2000 Protocol against the Smuggling of Migrants by Land, Sea and Air.⁷⁰ It is also supplemented by resolutions of the UN Security Council and customary international law.⁷¹
66. Despite this, Dr Galani told us that views were mixed on whether UNCLOS helps or hinders maritime security in practice. She explained that UNCLOS allows states to operate close to their shores—“they can adopt legislation to

63 [Q 13](#) (Professor Sir Malcolm Evans)

64 [Q 24](#) (Professor Natalie Klein)

65 [Q 24](#) (Professor Natalie Klein and Dr Sofia Galani)

66 [Q 24](#) (Dr Sofia Galani)

67 [Q 24](#) (Professor Natalie Klein and Dr Sofia Galani)

68 [Q 24](#) (Dr Sofia Galani)

69 [Q 24](#) (Professor Natalie Klein)

70 [Q 25](#) (Dr Sofia Galani)

71 [Q 24](#) (Professor Natalie Klein)

deal with maritime security in their territorial waters, for example”—but that, the further from the shore, “the less powers they have to deal with maritime security”. She thought that the “main problem ... is on the high seas” which are governed by the two principles of freedom of navigation and exclusive flag state jurisdiction, which “really limit what states can do when it comes to enhancing maritime security.”⁷²

67. Witnesses were clear that both the principles of freedom of navigation and exclusive flag state jurisdiction were important elements of the law of the sea. Sir Michael told us that exclusive jurisdiction of flag states is important as it “ensures that there is always one state responsible for the ship”, but also because it provides a mechanism for protecting freedom of navigation, as it ensures that states cannot “extend their jurisdiction to foreign ships on the high seas without the consent of the flag state”.⁷³ However, as discussed in Chapter 2, the widespread use of flags of convenience has undermined the principle of exclusive flag state jurisdiction, with implications for maritime security.

Flags of convenience

68. UNCLOS provides that vessels registered to any state can enjoy freedom of navigation on the high seas. UNCLOS allows for stop and search operations only in strictly defined situations, including the ground of reasonable suspicion that a vessel is involved in illegal activity, or when the aim of the operation is to establish the flag of the vessel. Otherwise, Article 94 of UNCLOS says that concerned parties should report the matter to the flag state, which can investigate the claim and take any action it finds necessary, including physical intervention.⁷⁴
69. But many ships are registered with flag states that are unwilling or unable to enforce laws on the high seas. Professor Petrig told us that the use of such flags of convenience has increased dramatically over time—in the 1950s open registries accounted for less than 5 per cent of global fleet, today the top three flag states by tonnage are flags of convenience.⁷⁵ She said that states have engaged in a “race to the bottom” with increasingly “lower costs and less regulation”, leading others to follow suit. This race is further accelerated by some flag states establishing “so-called second or international registries”, intended to “to repatriate tonnage lost to flags of convenience”, but which in reality accelerate the lowering of standards.⁷⁶ Dr Galani said that this practice has meant the high seas are now “an area where illegal activity thrives”.⁷⁷
70. Some witnesses doubted whether the issue could be solved without addressing the root causes of flags of convenience, which are economic. Professor Klein said that: “Until we get some fundamental economic reforms, or we are

72 [Q 25](#) (Dr Sofia Galani)

73 Written evidence from Sir Michael Wood QC ([UNC0009](#))

74 Written evidence from Professor James Harrison ([UNC0010](#))

75 [Q 81](#) (Professor Anna Petrig)

76 [Q 81](#) (Professor Anna Petrig). Between 1984 and 1989, eleven countries have decided to open second registries, usually in their offshore dependencies (e.g., Isle of Man, the Netherlands Antilles, Spanish Canary Islands). See more: Rodney Carlisle, ‘Second Registers: Maritime Nations Respond to Flags of Convenience 1984–1998’, *Northern Mariner*, vol. 19(3), (2009) pp 319-340: https://www.cnrs-scrn.org/northern_mariner/vol19/tnm_19_319-340.pdf [accessed 7 February 2022]

77 [Q 25](#) (Dr Sofia Galani)

willing to make some changes that might cost the industry some money, it seems very difficult to perceive how we might deal with flags of convenience.”⁷⁸

71. Nevertheless, there have been attempts to mitigate the security challenges created by flags of convenience. One proposal is to strengthen the requirement for ships to have a ‘genuine link’ with the flag state, provided for in Article 91 of UNCLOS.⁷⁹ This was a key impetus behind the 1986 UN Convention on Conditions for Registration of Ships. However, the agreement has only been ratified by 14 countries—far short of the 40 needed to enter into force. The UK is not a party. Professor Guilfoyle said that other, earlier attempts to strengthen this requirement via an international treaty also failed because “anywhere you drew a line for meaningful legal supervision, the countries falling below that line objected to its being brought into a UN treaty”.⁸⁰
72. Professor Guilfoyle suggested an alternative approach could be that states are permitted to refuse to recognise the flag of the vessel if they consider there is no genuine link between the vessel and the flag state. This would effectively render such ships “stateless” and would “enable them to be subjected to the jurisdiction of any warship or government vessel they encountered.”⁸¹ However, this has been rejected by ITLOS, which found that “the idea of a genuine link ... does not actually provide criteria for other states to challenge the validity of a ship’s right to fly a flag.”⁸²
73. While there is not yet international agreement on strengthening the genuine link requirement, we heard that individual states could do more to strengthen their own registries. Nautilus International told us that while the UK, which is considered a “quality flag”, requires shipowners to meet one of several criteria to establish a genuine link,⁸³ it is a “very wide list of criteria”. They also noted that the International Transport Workers’ Federation’s list of flags of convenience include several that are overseen by the UK Ship Register.⁸⁴
74. Another option is to strengthen the ability of port states to exercise jurisdiction over vessels when they come into port. Professor Barnes highlighted the Paris Memorandum of Understanding as an example of port state controls on a regional level. He said the IMO has endorsed this approach and also encouraged other regional groups to pursue similar arrangements.⁸⁵
75. The FCDO recognised that there is “currently no binding international framework to regulate the registration process itself.” It noted that the 1986

78 [Q 26](#) (Professor Natalie Klein). See also [Q 82](#) (Professor Anna Petrig and Professor Douglas Guilfoyle).

79 [Q 81](#) (Professor Anna Petrig and Professor Douglas Guilfoyle)

80 [Q 81](#) (Professor Douglas Guilfoyle)

81 *Ibid.*

82 *Ibid.*

83 Maritime and Coastguard Agency, *UK Ship Register: A Guide to Registration* (April 2019), p 4: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/799033/2019_April_A_Guide_to_Registration_V4.pdf [accessed 7 February 2022]

84 Written evidence from Nautilus International ([UNC0024](#)). The International Transport Workers’ Federation’s list of flags of convenience include flags which fly the Red Ensign, such as Gibraltar and Bermuda. Any vessel registered in the UK, Crown Dependency, or an Overseas Territory are allowed to fly the Red Ensign. As explained on the Red Ensign website: “Under the United Nations Convention on the Law of the Sea (UNCLOS) and under international law, all ships registered within the Crown Dependencies and UK Overseas Territories are British Ships” and “All Statutory Certificates for British ships registered within the Crown Dependencies and UK Overseas Territories ... are therefore issued under the responsibility of the UK.” See more at Red Ensign Group, ‘Frequently asked questions’: <https://www.redensigngroup.org/about-us/frequently-asked-questions/> [accessed 7 February 2022]

85 [Q 85](#) (Professor Richard Barnes)

UN Convention on Conditions for Registration of Ships “has not received sufficient support from states and has not entered into force”, but it did not explain why the UK has not signed the convention.⁸⁶

76. When asked, the Rt Hon Lord Goldsmith of Richmond Park, Minister for Pacific and the Environment at the Foreign, Commonwealth and Development Office and at the Department for Environment, Food and Rural Affairs, told us he “did not know” why the UK did not sign up to the 1986 Convention, but that he has recently asked the Department of Transport to undertake a review into this issue. He acknowledged that: “Our job would be made easier if we saw a tightening up of the system so that there was a very clear link between the flagged vessel and the jurisdiction that owns that flag”.⁸⁷ Andrew Murdoch, Legal Director at the FCDO’s Ocean Policy Unit told us that: “Part of the issue is that for this to be effective ... it needs widespread support, in particular from the states with the largest registries” and highlighted that the two requirements for the convention coming into force (40 signatories and over 25 per cent of the gross tonnage) are “[nowhere] near to being met at the moment.”⁸⁸ But this does not explain why the UK has not supported, or attempted to increase support for, the convention itself.
77. **While exclusive flag state jurisdiction is an important principle of the law of the sea, the widespread use of flags of convenience poses a particular challenge for maritime security and the enforcement of laws on the high seas.**
78. **The use of flags of convenience is a major barrier to the enforcement of rules on the high seas. Often flag states with the largest registered tonnage do not have the capacity or inclination to fulfil their obligations in terms of management, control or enforcement of their registered fleet. The Government should take a leadership role and work with others to ensure the link between vessels and the state in which they are registered is genuine and substantial.**
79. **The Government should commit to tightening the criteria of its own ship registry, to act as an example to other states.**
80. **It remains unclear why the UK Government has not signed the 1986 Convention on Conditions for Registration of Ships, and we regret that this has not happened. We ask that the Government includes in its response to this report more detail on the review they have commissioned into this, including its remit and when it will report.**
81. **We welcome the increased appetite for strengthening port state controls, and the International Maritime Organization should be commended for its efforts in this regard.**

Examples of maritime security challenges

Piracy and armed robbery at sea

82. Piracy is a clear maritime security challenge, but Professor Barnes said that when UNCLOS was negotiated, piracy was considered to be a “historic

86 Written evidence from the FCDO ([UNC0028](#))

87 [Q 103](#) (Lord Goldsmith of Richmond Park)

88 [Q 103](#) (Andrew Murdoch)

crime”.⁸⁹ However, the emergence of piracy in the Horn of Africa, south Asia, the Malacca Strait and the Gulf of Guinea has led to a renewed focus on modern piracy.⁹⁰

83. Witnesses explained that modern piracy is often caused by issues stemming from a state’s territory. These range from economic challenges to lack of governance and effective rule of law, and as a result, dealing with piracy requires also addressing its root causes on the land.⁹¹
84. Some witnesses thought that UNCLOS is generally successful at dealing with piracy. Professor Barnes told us that it provides “a reasonably clear framework” and that for dealing with activities such as armed robbery at sea, it is supplemented by other international agreements such as the Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation (the SUA convention).⁹² Professor Guilfoyle agreed, saying that UNCLOS’s provisions “create a broad and flexible jurisdiction to suppress piracy on the high seas and to prosecute those offences in national courts”.⁹³ Professor Barnes noted that there are practical challenges to implementing the rules, but that these generally need to be tackled “at a level below” UNCLOS.⁹⁴
85. Professor Barnes, Professor Guilfoyle and Admiral Sir Philip Jones, the former First Sea Lord, thought that the response to piracy off the coast of Somalia was successful.⁹⁵ Professor Barnes noted it took “considered effort in international co-operation and huge investment in the deployment of vessels, followed up by regional capacity-building initiatives”.⁹⁶ Professor Guilfoyle said that Article 110 of UNCLOS proved “sufficiently flexible to conduct those operations and to prosecute pirate financiers and kingpins who remained largely ashore but conducted acts of facilitation”.⁹⁷
86. However, Dr Ioannis Chapsos, Assistant Professor at the Centre for Trust, Peace and Social Relations at the University of Coventry, and colleagues thought that UNCLOS should be further refined to better address modern piracy. In their view, UNCLOS has “weakened counter-piracy activities” and there remains a lack of clarity around several issues including that of ‘hot pursuit’.⁹⁸ They explained that the provisions on the right of hot pursuit in Article 111 of UNCLOS “add strict limitations on pursuing a vessel suspected of engaging in piratical acts”, including that the pursuit must end once “the ship pursued enters the territorial sea of its own State or of a third

89 [Q 91](#) (Professor Richard Barnes)

90 *Ibid.*

91 *Ibid.*

92 *Ibid.*

93 [Q 79](#) (Professor Douglas Guilfoyle)

94 [Q 91](#) (Professor Richard Barnes)

95 [Q 91](#) (Professor Richard Barnes), [Q 79](#) (Professor Douglas Guilfoyle) and [Q 67](#) (Admiral Sir Philip Jones)

96 [Q 91](#) (Professor Richard Barnes)

97 [Q 79](#) (Professor Douglas Guilfoyle)

98 The right of hot pursuit provides coastal states with the ability to pursue vessels that have committed illegal acts within the state’s jurisdiction. For a lawful exercise of this right, the state must meet the conditions of a lawful pursuit under Article 111 UNCLOS, crucial among them is that the pursued vessel must commit an illegal act within the state’s jurisdiction, be continuously pursued from there and receive a valid order to stop. Pursuit must cease when the pursued vessel enters another state’s territorial sea.

State”. This “eases the evasion of prosecution by suspected pirates.”⁹⁹ They acknowledged that some limitations of UNCLOS were “partially rectified” in the SUA convention and the UN Convention against Transnational Organized Crime of 2000, but challenges remain.

87. Dr Chapsos and colleagues also noted that some of the initiatives to address the challenge of modern piracy can contravene or undermine UNCLOS. For example, many ships now use privately contracted armed security personnel when transiting through high-risk areas. This makes the enforcement of UNCLOS’s provisions even more challenging, as the convention lacks any provisions related to such non-state actors.¹⁰⁰ Privately contracted armed security personnel are discussed further in Chapter 5 with reference to human rights.
88. We heard that the increased use of maritime autonomous vehicles (MAVs; addressed further in Chapter 6) is also a challenge to UNCLOS’s provisions concerning piracy. Professor Petrig told us that it was unclear whether attacks using MAVs, such as those that have been carried out already in the Red Sea, could be classed as piracy:

“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 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.”¹⁰¹

Similarly, Dr Chapsos and colleagues noted that remotely hacking a MAV belonging to another state would not also legally be classified as an act of piracy, because Article 101 of UNCLOS requires the “physical boarding of the vessel to take place in the high seas for the crime to classify as piracy”.¹⁰²

89. Professor Petrig added that it would also be difficult to stretch the remit of UNCLOS to activities on land even if it emerged that the operator of a MAV engaging in piratical acts was doing so remotely from there. In the case of piracy off the coast of Somalia, where operations were often conducted from land (though not involving MAVs), enforcement jurisdiction within Somalia’s territorial sea was provided to states by the UN Security Council. But Professor Petrig said that states were reluctant to act on these powers.¹⁰³ She thought that the advent of MAVs required a reconsideration of how “the land and the sea are connected when it comes to the commission of crimes and jurisdictional issues”.¹⁰⁴
90. It became clear that addressing the challenge of modern piracy cannot be addressed solely under the UNCLOS umbrella. It requires domestic legislation, regional cooperation and capacity building, especially for states

99 Written evidence from Dr Ioannis Chapsos, Dr James Malcolm and Dr Robert McCabe, the Centre for Trust, Peace and Social Relations, Coventry University ([UNC0002](#))

100 *Ibid.*

101 [Q 79](#) (Professor Anna Petrig)

102 Written evidence from Dr Ioannis Chapsos, Dr James Malcolm and Dr Robert McCabe, the Centre for Trust, Peace and Social Relations, Coventry University ([UNC0002](#))

103 [Q 79](#) (Professor Anna Petrig)

104 *Ibid.*

lacking adequate resources to address the root causes of piracy.¹⁰⁵ As an example, Professor Barnes suggested the expansion of *ad hoc* agreements at the regional level, similar to the US-led proliferation security initiatives, “which allowed for *ad hoc* inspection and boarding of vessels flying other states’ flags as a cooperative initiative”.¹⁰⁶

91. **UNCLOS and related instruments have generally been successful at tackling piracy, but there remain challenges. Acts of piracy often originate from the land and cannot be solved by agreements focused only on the sea. However, supplementary agreements including the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation have enhanced the provisions of UNCLOS, and operations combating piracy along the coast of Somalia provide an example of how piracy can be successfully addressed in practice. The Government should further enhance its capacity building activities to assist other coastal states to maintain the good order of the oceans and suppress maritime security threats, including piracy and armed robbery at sea.**
92. **The advent of maritime autonomous vehicles provides a direct challenge to UNCLOS, which assumes vessels are crewed and cannot be operated remotely. The Government should monitor such developments carefully, and advocate for a clarification of the existing rules if there is an increase in the use of autonomous vehicles for piratical acts.**

Law enforcement of maritime zones

93. We heard that the zonal approach established by UNCLOS could present jurisdictional challenges, as shown by the example of provisions related to hot pursuit (see paragraph 86). However, a bigger issue is the effective enforcement of these laws. Professor Haines told us that if it were not for the presence of “enforcement potential”, many of the laws and regulations related to fisheries around the UK would have been broken. He argued that “there is a tremendous amount of stuff going on ... on the oceans that will not result in a steady state of governance purely through compliance”.¹⁰⁷
94. This is particularly relevant in the case of developing states. Professor Haines and Professor Clive Schofield, Head of Research at the WMU-Sasakawa Global Ocean Institute at the World Maritime University noted that developing states often do not have the capacity for effective surveillance and enforcement of their exclusive economic zones. As a result, these countries need support in terms of advice and resources to monitor and enforce compliance with the law.¹⁰⁸
95. Sir Philip told us that the UK and other navies are already providing such support. He mentioned the work of HMS Trent in West Africa and support provided in terms of training and resources, such as Western navies selling or gifting older small patrol vessels to developing countries.¹⁰⁹ Additional

105 [Q 91](#) (Professor Richard Barnes)

106 [Q 92](#) (Professor Richard Barnes)

107 [Q 6](#) (Professor Steven Haines)

108 [Q 6](#) (Professor Steven Haines) and [Q 61](#) (Professor Clive Schofield). See also written evidence from Professor Steven Haines ([UNC0037](#)).

109 [Q 74](#) (Admiral Sir Philip Jones)

opportunities for enhanced enforcement may be created by the use of MAVs (discussed in Chapter 6).¹¹⁰

96. **The UK should become an advocate and champion of developing and island states with regard to the protection of their coastal waters, exclusive economic zones, and the resources that they hold.**
97. **We ask that in its response to this report the Government sets out more detail about the kind of support (both in terms of capacity building and resources) the UK provides to developing countries to improve the effectiveness of law enforcement within their waters.**

China's actions in the South China Sea

98. Another category of challenges to maritime security concern instances where states interpret the provisions of UNCLOS in ways which ostensibly undermine it. Dr Bill Hayton, Associate Fellow at Chatham House's Asia-Pacific Programme, told us these challenges come in two main forms: "long-standing claims which are at odds with the principles of the treaty, and new claims by rising powers".¹¹¹ Both of these are exemplified by China's actions in the South China Sea.
99. China has made claims to an area of water in the South China Sea that goes beyond the 200 nautical mile EEZ provided for in UNCLOS, on the basis of what it refers to as 'historic rights'.¹¹² The area claimed is enclosed by a U-shaped line on Chinese charts (often referred to as the 'nine-dash line') and includes several island chains including the Paracel Islands and Spratly Islands. Dr Hayton told us that China has claimed sovereign rights and jurisdiction over these territories, as well as certain rights over the waters within U-shaped line, including fishing rights, navigation rights and priority rights of resource development.¹¹³ He said that this "represents a fundamental challenge to UNCLOS", which was "intended to supersede all such 'historic' claims", and that China's actions "pose a threat to ... the rules-based order in the South China Sea".¹¹⁴ Dr Kuok added that China is also attempting to claim greater maritime entitlements by building artificial islands at Mischief Reef, a low-tide elevation in the EEZ of the Philippines.¹¹⁵
100. In addition, in 1996 China declared a set of 'straight baselines' around the Paracel Islands and claimed the area within them as 'internal waters'. Dr Hayton told us that this is "not allowable under UNCLOS" as "only archipelagic states—countries that are entirely made up of islands ...—are permitted to do this."¹¹⁶ If China's decision were to stand, it would have implications for a key aspect of freedom of navigation provided for in UNCLOS—the right of innocent passage through territorial waters. Article 24 of UNCLOS allows vessels of all flags to pass through the territorial sea of another country without its prior authorisation if they proceed without stopping or delay and "do nothing to threaten 'peace, good order or security'

110 Written evidence from Professor Natalie Klein, Professor Douglas Guilfoyle, Professor Saiful Karim and Professor Rob McLaughlin (UNC0003)

111 Written evidence from Dr Bill Hayton (UNC0012). See also written evidence from Dr Lynn Kuok (UNC0044).

112 Written evidence from Dr Lynn Kuok (UNC0044)

113 Written evidence from Dr Bill Hayton (UNC0012). See also written evidence from Dr Lynn Kuok (UNC0044).

114 Written evidence from Dr Bill Hayton (UNC0012)

115 Written evidence from Dr Lynn Kuok (UNC0044)

116 Written evidence from Dr Bill Hayton (UNC0012)

or jeopardise anyone’s safety”.¹¹⁷ There is, however, no right of innocent passage through internal waters.

101. China has also passed domestic legislation which Dr Lynn Kuok, Shangri-La Dialogue Senior Fellow for Asia-Pacific Security at the International Institute for Strategic Studies, told us is “inconsistent” with UNCLOS. In 1992 it passed the Law on the Territorial Sea, which states that “Foreign ships for military purposes shall be subject to approval by the Government of the People’s Republic of China for entering the territorial sea of the People’s Republic of China”. Dr Hayton told us that: “The world now faces a situation where China makes use of the innocent passage provisions of UNCLOS abroad but denies that they apply in the South China Sea.”¹¹⁸
102. In 2013, the Philippines brought a legal case against China under the dispute settlement mechanism set out in UNCLOS Annex VII.¹¹⁹ The Arbitral Tribunal did not have jurisdiction, however, to resolve the question of sovereignty over the maritime features in dispute. But in 2016, it found that none of the disputed features were “islands” as defined by Article 121 UNCLOS and therefore none were entitled to generate a 200 nautical mile EEZ or continental shelf. It also held that China’s claims to “historic rights, or other sovereign rights or jurisdiction, with respect to the maritime areas of the South China Sea encompassed by the relevant part of the ‘nine-dash line’ are contrary to the Convention”. China did not engage with the arbitration and has refused to recognise the ruling.¹²⁰
103. The FCDO told us that the Government’s view is that freedom of navigation “must be safeguarded, as must the right of innocent passage through territorial seas, transit passage through international straits used for navigation”.¹²¹ The Government considers the preservation of freedom of navigation in the South China Sea as “essential to the UK’s economic and security interests, and that of our allies and partners”.¹²²
104. The FCDO said that the Government is “committed to reinforcing the primacy of UNCLOS in the South China Sea and has most recently supported this position in practice through the deployment of the UK Carrier Strike Group to South China Sea in 2021”.¹²³ The UK has also exercised the right of innocent passage in other disputed waters, including through the territorial seas of Ukraine (Crimea) in June 2021, the international waters of the Taiwan Strait of 26 September 2021, the Gulf of Guinea in October 2021; and routine Royal Navy operations in the Strait of Hormuz.¹²⁴
105. Nevertheless, witnesses suggested the UK could do more to uphold the principle of freedom of navigation. Dr Hayton recommended that the

117 *Ibid.*

118 *Ibid.*

119 Permanent Court of Arbitration, “The South China Sea Arbitration (*The Republic of Philippines v. The People’s Republic of China*)”: <https://pca-cpa.org/en/cases/7/> [accessed 7 February 2022]

120 Written evidence from Bill Hayton (UNC0012). See also written evidence from Dr Lynn Kuok (UNC0044).

121 Written evidence from the FCDO (UNC0028)

122 *Ibid.*

123 *Ibid.*

124 *Ibid.*

UK should consistently make it clear that UNCLOS Article 24 “applies everywhere”, including to Chinese ships:

“When Chinese warships make use of ‘innocent passage’ rules to sail near the UK, this should be publicised. The UK might want to take a view on whether its own belief in ‘innocent passage’ through the English Channel should apply to countries that don’t apply the same interpretation of international law in their own waters.”¹²⁵

Dr Kuok agreed, saying that that the UK should make it clear it “does take a position on whether certain features are land features (‘islands’ or ‘rocks’) or merely low-tide elevations not entitled to an independent sovereignty claim or territorial sea”. It could do this by “sailing within 12 nautical miles of features the international tribunal ruled are low-tide elevations”, such as those at Mischief Reef.¹²⁶

106. SafeSeas agreed that the UK could do more, saying that its history, expertise and network of allies and partners puts it in a strong position to “lead the collective effort towards sharing the burden and the benefits of securing the sea while maintaining freedom of navigation”. It recommended the UK builds a network of like-minded maritime nations under a “‘collective sea power’ strategy”. Initiatives under the strategy would include “confidence-building measures with allies and partners, port calls, joint naval exercises, and showing the flag in contested waters”.¹²⁷
107. **The Government should consider noncompliance with UNCLOS as a fundamental violation of the international rules-based order. Such violations should give cause for the Government to consider its relationship with noncompliant states.**
108. **China’s actions in the South China Sea directly undermine and are at odds with the principle of freedom of navigation provided for in UNCLOS.**
109. **Evidence suggests that it is highly unlikely that China will decide to change its policy of claiming exclusive jurisdiction over the majority of the South China Sea and will continue to reject the principles of freedom of navigation and freedom of innocent passage as outlined by UNCLOS.**
110. **China’s stance poses a challenge to international law. The UK Government should continue to work with its partners and allies to protect and preserve the principles of freedom of navigation not only in South China Sea, but in every region where it is challenged.**

Security threats stemming from climate change

111. We heard that climate change has the potential to exacerbate maritime security challenges. SafeSeas told us that climate change is a “threat multiplier”, as the “effects of climate change on natural systems ... impact negatively on human systems”, both directly (for example, via the displacement of people or the reduction and relocation of fish stock) and indirectly (for example by

125 Written evidence from Dr Bill Hayden ([UNC0012](#))

126 Written evidence from Dr Lynn Kuok ([UNC0044](#))

127 Written evidence from SafeSeas ([UNC0014](#))

enhancing poverty and inequalities).¹²⁸ They said that such pressures can “undermine legitimate coastal livelihoods and may provide fertile ground for the growth of blue crimes”.¹²⁹

112. Witnesses identified the Arctic as a region where climate change may have significant maritime security implications.¹³⁰ Dr Galani told us that the polar regions “used to be considered safe” and states did “not have to worry much about maritime security in those regions”. But ice melt has led to a “concentration of vessels and humans” in the Arctic in particular, raising concerns about “illegal fishing, human security and safety, and marine pollution”.¹³¹ There are already disagreements about which states are entitled to parts of the Arctic Ocean which historically have been ice-covered but will increasingly be open seas. These issues are discussed further in Chapter 4.
113. **Climate change is likely to lead to additional maritime security challenges, particularly in the Arctic. We ask that in its response to this report the Government provides us with information about how it is monitoring security-related developments in the Arctic.**

128 *Ibid.*

129 Written evidence from SafeSeas ([UNC0014](#)). According to SafeSeas, ‘blue crime’ refers to transnational organised crime at sea, including “marine piracy, the smuggling of narcotics and other illicit goods, irregular migration, illegal fishing and deliberate pollution”.

130 Written evidence from Monim Benaissa ([UNC0007](#))

131 [Q 24](#) (Dr Sofia Galani)

CHAPTER 4: CLIMATE CHANGE AND THE ENVIRONMENT

114. Climate change was not well understood in the 1970s and 1980s when UNCLOS was negotiated, and we heard that the convention is therefore “largely climate silent”.¹³² This presents a range of challenges in the 21st century, where the impacts of climate change, including sea level rise, are already a reality, and Professor Schofield told us that in many ways, UNCLOS is “not adequate” for addressing the impacts of climate change.¹³³

Baselines and maritime entitlements

115. The recently published Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) found that “global mean sea level has risen faster since 1900 than over any preceding century in at least the last 3000 years”.¹³⁴ Under an intermediate greenhouse gas emissions scenario, the global mean sea level will likely increase by between 0.44 and 0.76 metres by 2100, though it could increase as much as 1.01 metres under a very high emissions scenario.
116. Rising sea levels pose a challenge to the maritime entitlement provisions in UNCLOS. Currently, maritime zones are calculated from baselines. The most commonly used baseline (the ‘normal baseline’) follows the low-water line along the coast of a state. Professor Schofield told us that the “traditional view” is that baselines move with the low-water line (they are ‘ambulatory’).¹³⁵ As sea levels rise, the low-water line of many coasts will move inwards.
117. This interpretation has significant implications for coastal states, especially small island states and low-lying states. Witnesses noted that low-lying island states face an “existential threat” due to rising sea levels.¹³⁶ Hayley Keen and Charlotte Nichol told us that:

“Submerging’ or ‘disappearing’ states are those island states at risk of suffering complete territorial inundation and thereby losing their status under UNCLOS and the 1933 Montevideo Convention criteria; namely, defined ‘territory’ (generally in the terrestrial sense), a permanent population, an effective government and the capacity to enter into relations with other states.”¹³⁷

118. Loss of territory will therefore, in theory, impact a state’s maritime entitlements, as these stem from the land. Dr Philipp Kastner, Senior Lecturer at Law School at the University of Western Australia, referred to this as a “double loss”.¹³⁸ Even where land is not fully submerged by rising sea levels, contracting baselines could mean that an island state’s territory could be reclassified and lose maritime entitlements. Article 121 of UNCLOS

132 [Q 60](#) (Professor Clive Schofield). See also [Q 60](#) (Professor Surabhi Ranganathan) and written evidence from the Ocean Law Specialist Group ([UNC0042](#)).

133 [Q 60](#) (Professor Clive Schofield). See also written evidence from the Advisory Committee on Protection of the Sea ([UNC0017](#)).

134 Intergovernmental Panel on Climate Change, *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, (Cambridge: Cambridge University Press, 2021): https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf [accessed 7 February 2022]

135 [Q 62](#) (Professor Clive Schofield). See also written evidence from Sir Michael Wood ([UNC0009](#)).

136 Written evidence from Dr Philipp Kastner ([UNC0029](#)). See also written evidence from Hayley Keen and Charlotte Nichol ([UNC0038](#)) and the Ocean Law Specialist Group ([UNC0042](#)).

137 Written evidence from Hayley Keen and Charlotte Nichol ([UNC0038](#))

138 Written evidence from Dr Philipp Kastner ([UNC0029](#))

defines an island as a “naturally formed area of land, surrounded by water, which is above water at high tide”.¹³⁹ Islands enjoy the same maritime zones (territorial sea, contiguous zone, EEZ and continental shelf) as other land territory. If it cannot sustain human habitation or economic life, it is classified as a ‘rock’ and is not entitled to an EEZ or continental shelf. If it is only above water at low tide, it is classified as a low-tide elevation and has no maritime entitlements.¹⁴⁰ Professor Evans noted that “barely perceptible tidal increase[s] in water” could result in islands being reclassified as rocks or low-tide elevation and states losing significant portions of their maritime entitlements.

119. In response to this issue, in August 2021 the Pacific Islands Forum (PIF), which represents many of the island states most affected by rising sea levels, issued a declaration confirming its intention to maintain maritime boundaries and zones at their current position (to ‘fix’ their baselines).¹⁴¹ The declaration notes that UNCLOS “was premised on the basis that, in the determination of maritime zones, coastlines and maritime features were generally considered to be stable”, which has not proved to be the case. It also notes that UNCLOS “imposes no affirmative obligation to keep baselines and outer limits of maritime zones under review nor to update charts or lists of geographical coordinates once deposited with the Secretary-General of the United Nations”, and as such “our maritime zones ... shall continue to apply, without reduction, notwithstanding any physical changes connected to climate change-related sea-level rise.”¹⁴²
120. Professor Churchill and Dr Hartmann told us that “opinion is divided” on whether baselines should be fixed, considering that maritime entitlement has always been premised on sovereignty over land.¹⁴³ But Professor Serdy told us that the PIF Declaration would be a “sensible legal policy response for all coastal States, not just the 17 that adopted it”, as it “avoids the gradual diminution of the areas over which [states] currently exercise sovereignty and jurisdiction... while other States lose nothing by it”.¹⁴⁴ He recommended that the UK adopt a similar policy position. Dr Kastner agreed, saying that such a policy would be “beneficial to all coastal states, including the UK”.¹⁴⁵ Dr Surabhi Ranganathan, Associate Professor at the University of Cambridge and Co-Acting Director of the Lauterpacht Centre for International Law, and Professor Schofield noted that there is a “justice” element to this issue, as states that have contributed least to climate change are most vulnerable to its consequences.¹⁴⁶
121. We heard support for the PIF’s interpretation that UNCLOS does not require states to keep their charts updated and can therefore maintain the maritime boundaries and zones they have previously deposited with the

139 United Nations Convention on the Law of the Sea (UNCLOS), Article 121: https://www.un.org/depts/los/convention_agreements/texts/unclos/closindx.htm [accessed 7 February 2022]

140 Unless it is located within the coastal state’s territorial sea.

141 Pacific Islands Forum, ‘Declaration on Preserving Maritime Zones in the Face of Climate Change-related Sea-Level Rise’, (6 August 2021): <https://www.forumsec.org/2021/08/11/declaration-on-preserving-maritime-zones-in-the-face-of-climate-change-related-sea-level-rise/> [accessed 7 February 2022]

142 *Ibid.*

143 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann (UNC0011)

144 Written evidence from Professor Andrew Serdy (UNC0004)

145 Written evidence from Dr Philipp Kastner (UNC0029)

146 Q 62 (Dr Surabhi Ranganathan) and Q 65 (Professor Clive Schofield)

United Nations.¹⁴⁷ The National Oceanography Centre also highlighted that where states have bilaterally or multilaterally agreed maritime boundaries, under the Vienna Convention on the Law of Treaties “such agreements cannot be terminated or withdrawn” if circumstances change.¹⁴⁸

122. We heard that for a policy of fixed baselines to be effective, it needs to be adopted by the majority of states. Sir Michael said that it was difficult to see how a “regional customary rule could assist PIF members, given that to be effective maritime zones need to be applicable ... towards all States”.¹⁴⁹ Hayley Keen and Charlotte Nichol said that while the development of regional customary international law via the PIF declaration is important and will be “highly influential”, developing *general* international law will also be “crucial to ensure that the practice of fixed baselines is binding on all states to UNCLOS.”¹⁵⁰ They advocated for the negotiation of a supplementary agreement to UNCLOS, similar to the Fish Stocks Agreement, to “secure the legality of fixed baselines in light of sea level rise.” They noted that this would have advantages to formally amending UNCLOS and recommended negotiating the agreement under the auspices of the UN General Assembly, which was the method used for the Fish Stocks Agreement, as it allows states who are not parties to UNCLOS (such as the United States) to consent to the agreement as well.¹⁵¹
123. Sir Michael told us that these issues are currently under consideration by the UN International Law Commission (ILC) as of its 2021 session.¹⁵² Professor Harrison explained that states will “have to respond to any recommendations from the International Law Commission, in a way that balances the need for stability and security in the law of the sea with the objective of promoting equity in responding to climate change” and that “serious consideration” will need to be given to the mechanism of change, “avoiding if possible a formal amendment to the Convention in order to preserve the integrity of UNCLOS.”¹⁵³
124. The Minister told us that the Government is “still considering what our position is in relation to the proposals by the small island developing states on baselines”.¹⁵⁴ Andrew Murdoch said that “the UK’s practice in its own baselines has been ambulatory”, but that “this issue is being looked at very carefully by the International Law Commission”. He added that while it is “clearly a very important issue” it is “one where states are not necessarily rushing to come out with a view” as this “might risk undermining the convention.”¹⁵⁵

147 Written evidence from the National Oceanography Centre ([UNC0021](#)). See also written evidence from Hayley Keen and Charlotte Nichol ([UNC0038](#)).

148 Written evidence from the National Oceanography Centre ([UNC0021](#)). Article 62(2) of the Vienna Convention on the Law of Treaties states that “A fundamental change of circumstances may not be invoked as a ground for terminating or withdrawing from a treaty: (a) if the treaty establishes a boundary; or (b) if the fundamental change is the result of a breach by the party invoking it either of an obligation under the treaty or of any other international obligation owed to any other party to the treaty.”

149 Written evidence from Sir Michael Wood ([UNC0009](#))

150 Written evidence from Hayley Keen and Charlotte Nichol ([UNC0038](#)). See also [Q 62](#) (Professor Clive Schofield).

151 Written evidence from Hayley Keen and Charlotte Nichol ([UNC0038](#))

152 Written evidence from Sir Michael Wood QC ([UNC0009](#))

153 Written evidence from Professor James Harrison ([UNC0010](#))

154 [Q 106](#) (Lord Goldsmith of Richmond Park). See also written evidence from the FCDO ([UNC0028](#)).

155 [Q 106](#) (Andrew Murdoch)

125. **Sea levels will continue to rise over the coming century as a result of climate change. This will have significant impacts on the traditional mechanisms of establishing maritime entitlements for coastal and island states. In particular, it will impact low-lying and small island states, which face an existential threat. The UK and its Overseas Territories will also be affected by this issue.**
126. **The Government should take a formal position that baselines should remain fixed in their current position. This would ensure that no states, including the UK and its Overseas Territories, lose their current maritime entitlements. The Government should work with partners to advance agreement amongst States Parties to UNCLOS and create supplementary legal mechanisms that secure maritime baselines and entitlements.**

Displaced persons and climate change-related refugees

127. Loss of statehood or territory as a result of sea level rise would lead to an increase in displaced people and refugees. The World Bank estimates that more than 200 million people could be displaced by the impacts of climate change by 2050.¹⁵⁶
128. We asked the Minister how prepared the UK is to support climate change refugees. He told us that the Government recognises that “climate change will increasingly become a significant factor in driving migration” and highlighted a Rapid Evidence Assessment undertaken by the FCDO on the impacts of climate change on migration patterns.¹⁵⁷ He also restated the UK’s commitment to the goals of the Global Compact on Refugees. But he did not outline any specific preparations the UK is undertaking to support climate change refugees.
129. **We are encouraged that the Government recognises that climate change will become a significant driving factor for migration, but ask that it provides further detail in its response to this report on the ways in which the UK is preparing to support these people in light of the real risk some may lose their territories and statehood. This is an immediate and growing problem which needs global leadership and political will. We ask that the response includes details of those territories most likely to be at risk and the number of people likely to be adversely affected.**

Impact of climate change on the marine environment

130. The climate and the oceans are inextricably linked. Professor Petrig said that it is “beyond doubt that the oceans play a very essential role in climate regulation”, referring to them as the “engine room of the climate system”.¹⁵⁸ Professor Guilfoyle told us that “nearly half of all carbon dioxide released in the period since industrialisation by human activity has been absorbed

156 The World Bank, ‘Groundswell Part 2: Acting on Internal Climate Migration’ (2021): <https://openknowledge.worldbank.org/handle/10986/36248> [accessed 7 February 2022]

157 Letter from Lord Goldsmith of Richmond Park to the Chair (11 January 2022): <https://committees.parliament.uk/publications/8554/documents/86402/default/>

158 [Q 80](#) (Professor Anna Petrig)

by the oceans”; without this, the level in the atmosphere would be much higher.¹⁵⁹

131. This has a range of impacts on the marine environment, including ocean acidification, changing ocean chemistry and changing ocean circulations.¹⁶⁰ In turn, these affect the abundance and distribution of marine species and the health of valuable ecosystems such as mangrove forests and coral reefs. Professor Harrison noted that the severity of these issues “varies on a regional basis”.¹⁶¹ The oceans are also affected by changing atmospheric circulations, air temperatures, and patterns of extreme weather caused by climate change.
132. While UNCLOS does not directly consider climate change, it places broad environmental obligations on states. Part XII of UNCLOS obliges states to “prevent, reduce and control pollution of the marine environment from any source” and to “take all measures necessary to ensure that activities under their jurisdiction or control are so conducted as not to cause damage by pollution to other States and their environment”.¹⁶² The Advisory Committee on the Protection of the Sea (ACOPS) told us that ‘any sources’ includes all marine, land and atmospheric sources of pollution, including greenhouse gas emissions.¹⁶³
133. Professor Malgosia Fitzmaurice, Professor of Public International Law at the Queen Mary University told us that pollution from shipping is addressed by the International Convention for the Prevention of Pollution from Ships (MARPOL), which was adopted in 1973, and is widely considered to be successful.¹⁶⁴ But Professor Churchill and Dr Hartmann explained that there are “no global rules addressing pollution from land-based sources”, which accounts for around 80 per cent of marine pollution.¹⁶⁵ Professor Harrison concurred: “In the case of pollution from land-based sources ... UNCLOS simply requires that states ‘take into account internationally agreed rules, standards and recommended practices and procedures’”. He said this “weak formulation ... gives states too much discretion to decide how to deal with this significant problem” and “the main global instruments on this topic are non-binding in character”.¹⁶⁶
134. We also heard that the oceans have not been a key consideration in international attempts to combat greenhouse gas emissions, a major source of land-based pollution. Professor Barnes said that this is partly because “the law of the sea has largely developed apart from the climate change regime.” Reducing greenhouse gas emissions and addressing their impact is more explicitly within the remit of United Nations Framework Convention on Climate Change (UNFCCC). Dr Richard Caddell, Senior Lecturer in Law at the Cardiff Law School, told us this separation has led to the oceans “fall[ing] between two stools. The climate negotiations are busy looking at emissions, forests and other elements like that and consider this a law of the

159 Q 80 (Professor Douglas Guilfoyle). See also written evidence from the National Oceanography Centre (UNC0021).

160 Q 80 (Professor Douglas Guilfoyle). See also Q 60 (Professor Clive Schofield)

161 Written evidence from Professor James Harrison (UNC0010)

162 United Nations Convention on the Law of the Sea (UNCLOS), Article 194(2): https://www.un.org/depts/los/convention_agreements/texts/unclos/closindx.htm [accessed 7 February 2022]

163 Written evidence from the Advisory Committee on the Protection of the Sea (UNC0017)

164 Q 6 (Professor Malgosia Fitzmaurice)

165 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann (UNC0011)

166 Written evidence from Professor James Harrison (UNC0010)

sea problem. Arguably, the law of the sea considers this a climate change problem.”¹⁶⁷

135. Other witnesses agreed that the UNFCCC process has not sufficiently dealt with the impact on oceans and the marine environment, including in the landmark 2015 Paris Agreement, which committed to keeping global temperatures rise “well below” 2°C.¹⁶⁸ Professor Petrig said:

“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.”¹⁶⁹

136. The Minister told us that after the most recent Conference of the Parties to the UNFCCC (COP26, held in Glasgow in November 2021) there is now a greater recognition that “climate action is ocean action”, but that “the UNFCCC has not been considered the vehicle for delivering the scope of changes that we will need if we are to safeguard the future of the world’s oceans.”¹⁷⁰ Professor Petrig agreed that there was a “big step forward” at COP26, where “the oceans were formally incorporated in the UNFCCC process.”¹⁷¹ But she said that even if effectively implemented by states, she “seriously doubt[s] that the COP26 decisions are enough to address the negative consequences of climate change on the oceans, such as sea level rise, ocean acidification or ocean deoxygenation.”¹⁷²

137. Some witnesses thought that the provisions in UNCLOS could be better utilised to tackle the impact of climate change on the oceans. The Advisory Committee on the Protection of the Sea wrote: “Unlike the UNFCCC, [UNCLOS] does require the necessary actions to prevent, reduce and control this pollution with enforceable language and its legal mandate is binding and legally enforceable on all States.” They added: “That the UNFCCC does not require these actions does not render inapplicable [UNCLOS’s] obligations on the UNFCCC parties.”¹⁷³ Professor Guilfoyle agreed: “Introducing CO₂, or indirectly excess heat energy, into the oceans would be relatively straightforward to class as pollution of the ocean under Article 1 of UNCLOS.”¹⁷⁴

138. We heard that competent international organizations under UNCLOS were already being used to address aspects of this issue. Professor Schofield told us that the IMO has set a target of reducing carbon dioxide emissions by 40 per cent by 2030.¹⁷⁵ Professor Harrison said that progress has been made on setting energy efficiency standards for new ships but “significant challenges

167 Q 36 (Dr Richard Caddell)

168 United Nations Framework Convention on Climate Change, ‘The Paris Agreement’, <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement> [accessed 7 February 2022]

169 Q 80 (Professor Anna Petrig). See also Q 80 (Professor Douglas Guilfoyle).

170 Q 97 (Lord Goldsmith of Richmond Park)

171 Q 80 (Professor Anna Petrig)

172 Q 80 (Professor Anna Petrig). See also Q 80 (Professor Douglas Guilfoyle).

173 Written evidence from the Advisory Committee on the Protection of the Sea (UNC0017)

174 Q 80 (Professor Douglas Guilfoyle)

175 Q 61 (Professor Clive Schofield)

remain in converting the existing fleet to minimise emissions”.¹⁷⁶ However, he said that:

“The United Kingdom should be commended for its leadership role in this respect, being one of the first countries to produce a national action plan to address greenhouse gas emissions from ships (the Clean Maritime Plan) ... [and] one of several states who launched a Declaration on Zero Emission Shipping by 2050 at COP 26.”¹⁷⁷

He added that it is “vital that the signatories to the declaration work through the IMO to get multilateral agreement on more ambitious measures as a matter of urgency, in particular a more ambitious IMO Strategy when it is reviewed in 2023”.¹⁷⁸

139. As is common to several of the challenges facing UNCLOS, we heard that enforcement is difficult. On the issue of land-based sources of pollution, Professor Barnes and Professor Elizabeth Kirk, Professor of Global Governance and Ecological Justice at the University of Lincoln, told us that “it is not that the obligations ... are not often subject to enforcement action, but that it is left to the discretion of states to interpret and decide how to implement those obligations.”¹⁷⁹
140. We heard that UNCLOS’s dispute settlement mechanisms could be used by states who consider that other states are not fulfilling their environmental obligations. Professor Guilfoyle told us that “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.”¹⁸⁰ Dr Ranganathan noted that there has already been a “rise in climate litigation in domestic courts”, and that the dispute settlement mechanisms under UNCLOS could be used in a similar way.
141. However, UNCLOS’s mechanisms have not been used for this purpose so far and Dr Ranganathan said the process would face “difficulties”. First, the Tribunal might decide it does not have the jurisdiction for a dispute that is “more properly a climate dispute, not an ocean dispute”, and may suggest it should be considered under procedures provided for under climate treaties. Second: “The language in which UNCLOS specifies duties to the marine environment is even now both weak and qualified. The same Part XII that set out states’ rights to protect the marine environment also reiterates their right to exploit their natural resources.” She said it was “unclear” what litigation would achieve “without strengthening the substantive duties” first and recommended that the UK takes a greater role in strengthening these duties through its own practice and advocacy at international fora.¹⁸¹
142. There is also the potential for the dispute settlement mechanisms under UNCLOS to be used for Advisory Opinions. Professor Petrig gave the example of the recently formed Commission of Small Island States on Climate Change and International Law, which 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.” She saw “various

176 Written evidence from Professor James Harrison ([UNC0010](#))

177 *Ibid.*

178 *Ibid.*

179 Written evidence from Professor Richard Barnes and Professor Elizabeth Kirk ([UNC0015](#))

180 [Q 80](#) (Professor Douglas Guilfoyle)

181 [Q 64](#) (Dr Surabhi Ranganathan)

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”.¹⁸² Professor Guilfoyle agreed, saying that recourse to ITLOS for an Advisory Opinion by 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”.¹⁸³

143. **UNCLOS places states under an obligation to “prevent, reduce and control pollution of the marine environment” from all sources, including greenhouse gas emissions. This obligation is increasingly important because of the inter-related nature of climate change and environmental degradation, including via ocean acidification and the displacement of marine species. Despite success in managing marine sources of pollution, there has been less attention paid to the impacts of greenhouse gas emissions and climate change on the oceans. In part, this results from a lack of coordination between the UNCLOS and UNFCCC processes. The Government should continue to push for recognition of the oceans within the UNFCCC, and for greater coordination between the UNFCCC and UNCLOS processes.**
144. **The obligations in UNCLOS and related instruments to protect the marine environment relating to land-based sources of pollution are weaker than those relating to marine-based pollution, which is successfully managed by the MARPOL treaty. Strengthening the duties relating to land-based sources of pollution will require greater cooperation between the UNFCCC and UNCLOS processes. The UK Government should aim to be a leader in this regard.**
145. **The UK should continue its efforts to be an international leader in net zero shipping, and work through the IMO to get multilateral agreement on more ambitious measures.**

Distribution of fish stocks

146. UNCLOS provides the legal framework for the management of fish stocks. Under the Fish Stocks Agreement (the second implementing agreement to UNCLOS), fisheries that straddle EEZs and those in the high seas are managed by Regional Fisheries Management Organizations (RFMOs).
147. Professor Barnes and Kirk told us that climate change will impact the distribution of fish stocks and marine biodiversity more generally:

“Both will change as warming temperatures drive species poleward and as ocean acidification interferes with the abilities of some species to thrive by interfering, for example, with the ability to form shells. Species moving poleward will act in the same way that invasive species do, at times out-competing ‘native’ species and changing ecosystems functions and dynamics.”¹⁸⁴

182 Q 80 (Professor Anna Petrig)

183 Q 80 (Professor Douglas Guilfoyle). See also written evidence from Dr Massimo Lando and Dr Nicolo Ridi (UNC0041) and written evidence from Professor Douglas Guilfoyle and Professor Natalie Klein (UNC0001).

184 Written evidence from Professor Richard Barnes and Professor Elizabeth Kirk (UNC0015)

148. This poses several challenges for the management of fisheries. First, it increases “uncertainty... and diminishes the scientific basis of decisions on catch allowance”. Professors Barnes and Kirk explained that RFMOs have already “struggled to develop equitable and flexible allocation rules to deal with the distribution of fish” and that “climate induced changes will make this even more difficult to develop and implement in the future.”¹⁸⁵ Professor Churchill and Dr Hartmann gave the example of north-east Atlantic mackerel, which until recently was managed co-operatively by the EU, the Faroe Islands and Norway. They told us that: “Climate-induced changes have affected the distribution of the mackerel so that it is now also found in the EEZ of Iceland and on the high seas”. As such, “the former trilateral arrangement has become outdated, but an effective arrangement to replace it has not yet been agreed.”¹⁸⁶
149. Second, due to the nature of maritime jurisdiction, changing distributions of fish stocks may generate “winners and losers”, as fish stocks move away from traditional fishing grounds.¹⁸⁷ The Environmental Justice Foundation said that this could lead to disputes, and gave the example of West Africa where such pressures are already present. They noted that “Fishers are already travelling further and for longer periods than in the past in response to dwindling returns on their excursions,” and that this “will continue to pose significant challenges to transboundary disputes as fishers cross rigid national or institutional jurisdictions, either legally or illegally, to maintain their livelihoods”.¹⁸⁸
150. The FCDO were also aware of the economic implications of climate-change induced changes to fish distributions:
- “The warming, acidification and deoxygenation of the ocean is changing the abundance and distribution of fish populations. This will affect the fishing opportunities of States, with some benefitting from increases and others suffering losses. This poses a problem in terms of food security and livelihoods; could be a potential source of friction between States and will be a significant management issue for Regional Fisheries Management Organisations.”¹⁸⁹
151. Professor Barnes and Professor Kirk told us that cooperation will be critical for the management of fisheries, in particular with neighbouring states. They said:
- “Failure to agree cooperative measures and to reach compromise on competing interests will only result in costly disputes and risks to already vulnerable fish stocks. The UK needs to show leadership in existing international fora, and to build strategic partnerships with other States to maximise opportunities for collective gains.”¹⁹⁰

The implications for the management of fish stocks as an economic resource will be discussed further in Chapter 7.

185 *Ibid.*

186 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#))

187 Written evidence from Professor Richard Barnes and Professor Elizabeth Kirk ([UNC0015](#))

188 Written evidence from the Environmental Justice Foundation ([UNC0036](#))

189 Written evidence from the FCDO ([UNC0028](#))

190 Written evidence from Professor Richard Barnes and Professor Elizabeth Kirk ([UNC0015](#))

152. **Climate change is already altering the distribution of fish stocks in the global ocean and will continue to do so. This creates the potential for disputes, as fish stocks move away from traditional fishing grounds.**
153. **Cooperation with partners, especially neighbouring states, will be crucial to manage the implications of changing distributions of fish stocks.**

The Arctic

154. The Arctic is at particular risk from climate change.¹⁹¹ The IPCC Sixth Assessment Report found that there is high confidence that the Arctic will warm at around twice the rate of average global warming, and that it is likely the Arctic will be “practically” ice-free in September at least once before 2050.¹⁹²
155. Dr Ranganathan told us that there is a danger that as the sea ice melts, the Arctic might end up “being treated just like the rest of the ocean” and Arctic states may make “expanded continental shelf claims” over it.¹⁹³ Professor Schofield added that there are already “multiple and overlapping assertions of rights” from the five Arctic coastal states (the ‘Arctic Five’) but that so far, the states are “playing by the rules” by making submissions to the Commission on the Limits of the Continental Shelf, the organisation under UNCLOS tasked with delimiting continental shelf claims.¹⁹⁴
156. There are also concerns about the protection of marine biodiversity in the high seas of the Arctic, which Dr Ranganathan told us is a “very fragile marine environment”.¹⁹⁵ Monim Benaissa, part-time Professor and Researcher at the University of Ottawa’s Faculty of Law, wrote that major fishing nations are likely to extend their operations into the Central Arctic Ocean as ice retreats.¹⁹⁶ In 2018, the EU and nine countries (including the Arctic Five) signed the Agreement to prevent Unregulated High Seas Fisheries in the central Arctic Ocean, and as a result, no commercial fishing presently takes place in that region. However, Monim Benaissa explained that the agreement has only “temporarily frozen” fishing activity in these waters, and that “the race to commercial exploitation is not ruled out but is postponed.” He added that the Arctic Council alone will not be able to legislate for this issue, as under UNCLOS it does not have jurisdiction over the high seas, and the involvement of third-party states, including the UK, will be necessary for the effective implementation of conservation efforts such as MPAs.
157. Shrinking ice cover may also lead to expanded shipping routes. Dr Ranganathan said this will raise questions as to whether these waters are within national jurisdictions (as Canada claims), or if they will be regarded as international waters.¹⁹⁷ Dr Youri van Logchem, Senior Lecturer at the University of Swansea’s Institute of International Shipping and Trade Law, highlighted that increased shipping will have environmental impacts, but

191 Q 63 (Dr Surabhi Ranganathan)

192 Intergovernmental Panel on Climate Change, *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, (Cambridge: Cambridge University Press, 2021): https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf [accessed 7 February 2022]

193 Q 63 (Dr Surabhi Ranganathan)

194 Q 63 (Professor Clive Schofield)

195 Q 63 (Dr Surabhi Ranganathan)

196 Written evidence from Monim Benaissa (UNC007)

197 Q 63 (Dr Surabhi Ranganathan)

that there are uncertainties about how these can be addressed by UNCLOS. Article 234 of UNCLOS allows coastal states to adopt shipping regulations that go further than the IMO conventions in order to prevent and control pollution in ice-covered areas. This has been relied upon by states including Canada and Russia. But this is premised on the area being ice-covered for a majority of the year. Dr van Logchem explained that when that is no longer the case, some states could argue Article 234 is redundant, limiting coastal states' ability to prevent pollution.¹⁹⁸

158. The FCDO told us that it “recognises economic opportunities” in the Arctic as the ice melts, but that “is clear that they must be achieved within the framework of UNCLOS, and that we must work to protect the Arctic environment, and to prevent contraventions of the rules based international system on which global prosperity depends.”¹⁹⁹
159. **The Arctic is a fragile and valuable marine environment that is facing significant climate change impacts. It is vital that the increased economic opportunities are not prioritised over protecting the marine environment.**
160. **We welcome the recent 16-year international agreement banning commercial fishing in the Central Arctic Ocean. The UK, in its role as an observer at the Arctic Council, should continue to advocate for the prevention of unregulated fishing in the Arctic Ocean, and for the establishment of marine protected areas.**

Marine biodiversity

161. We heard that there are “accelerating levels of biodiversity loss in the marine environment”.²⁰⁰ The Food and Agriculture Organization estimate that around one-third of global fish stocks are over fished,²⁰¹ and in a 2014 only 3 per cent of the global ocean was found to be “free from human pressure”.²⁰² While UNCLOS includes broad obligations for states to “protect and preserve the marine environment”,²⁰³ we heard that it currently lacks detailed mechanisms to enforce this obligation.²⁰⁴
162. There are other conventions aimed at the conservation of the marine environment and marine biodiversity. These include the Convention on Migratory Species, the Convention on International Trade in Endangered Species, the Whaling Convention and the UNESCO World Heritage Convention and the Ramsar Convention on Wetlands.²⁰⁵ Under the Convention on Migration Species, several supplementary agreements have been agreed at the regional level, which has led to the establishment of many

198 Q 35 (Dr Youri van Logchem)

199 Written evidence from the FCDO (UNC0028)

200 Written evidence from the Ocean Law Specialist Group (UNC0042)

201 Food and Agriculture Organization of the United Nations, *The State of World Fisheries and Aquaculture 2020*, (2020): <https://www.fao.org/documents/card/en/c/ca9229en> [accessed 7 February 2022]

202 Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, *The global assessment report on biodiversity and ecosystem services. Summary for policymakers*, (2019): https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf [accessed 7 February 2022]

203 United Nations Convention on the Law of the Sea (UNCLOS), Article 192: https://www.un.org/depts/los/convention_agreements/texts/unclos/closindx.htm [accessed 7 February 2022]

204 Written evidence from the Ocean Law Specialist Group (UNC0042). See also written evidence from Professor Robin Churchill and Dr Jacques Hartmann (UNC0011).

205 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann (UNC0011). See also written evidence from Dr Hayley Roberts (UNC0027).

marine protected areas (MPAs) across the world.²⁰⁶ Greenpeace UK wrote that MPAs are “the most cost-effective means to enable marine life to recover and adapt to the impacts of multiple stresses and climate change”.²⁰⁷

163. Joanna Szuminska told us that it was a UK proposal that led to the establishment of the first MPA-like entity in the Ross Sea region.²⁰⁸ Since then it has established many MPAs in its maritime zones as well as those of its Overseas Territories via the Blue Belt Programme, a UK Government initiative launched in 2016 to support marine protection in Overseas Territories.²⁰⁹ However, the National Oceanography Centre told us that while the Blue Belt Programme has established large MPAs in “less populated” Overseas Territories, those that “rely more on their marine space to generate income and that have not benefited from the Blue Belt Programme need support to responsibly and sustainably manage their blue economies”.²¹⁰
164. Despite the efforts of individual countries to establish MPAs, we heard that they cover less than 1 per cent of the world’s oceans.²¹¹ There are international efforts to increase this coverage—in its post-2020 global biodiversity framework, the UN Convention on Biodiversity (CBD) called for 30 per cent of the world’s land and ocean areas to be conserved through systems of protected areas. This is a topic of discussion at the 15th Conference of the Parties to the convention (CBD COP15), which began in 2021 and will continue in 2022.²¹²
165. The UK Government has established the Global Ocean Alliance, which aims to protect at least 30 per cent of the global ocean under MPAs or other area-based conservation measures by 2030 (the ‘30by30’ target).²¹³ The Alliance currently has 71 members.
166. Greenpeace UK told us that while there is increasing support for the 30by30 target, “for the vast majority of the global oceans there is not yet a legal mechanism to create ocean sanctuaries and deliver effective protection from cumulative pressures” and “no specific framework ... for the establishment of MPAs”.²¹⁴ This is because the majority of the oceans are not in the jurisdiction

206 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#))

207 Written evidence from Greenpeace UK ([UNC0025](#))

208 Written evidence from Joanna Szuminska ([UNC0034](#))

209 Examples of British Overseas Territories supported by the Blue Belt Programme include the Pitcairn Islands, St Helena, and the British Indian Ocean Territory. See more: Foreign, Commonwealth and Development Office, Centre for Environment, Fisheries and Aquaculture Science, Marine Management Organisation, Department for Environment, Food & Rural Affairs, ‘The Blue Belt Programme’ (17 November 2021): <https://www.gov.uk/guidance/the-blue-belt-programme> [accessed 7 February 2022]

210 Written evidence from the National Oceanography Centre ([UNC0022](#))

211 Written evidence from Greenpeace UK ([UNC0025](#)) and the Pew Charitable Trusts ([UNC0040](#)). The 2019 Global Assessment Report on Biodiversity and Ecosystem Services suggests it is around 7% (p 15). Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, *The global assessment report on biodiversity and ecosystem services. Summary for policymaker* (2019): https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf [accessed 7 February 2022]

212 United Nations Convention on Biological Diversity, ‘First detailed draft of the new post-2020 global biodiversity framework’, (6 July 2021): <https://www.cbd.int/article/draft-1-global-biodiversity-framework> [accessed 7 February 2022]. See also written evidence from The One Ocean Hub ([UNC0030](#)).

213 Department for Environment, Food & Rural Affairs, ‘Global Ocean Alliance: 30by30 initiative’: <https://www.gov.uk/government/topical-events/global-ocean-alliance-30by30-initiative/about> [accessed 7 February 2022]

214 Written evidence from Greenpeace UK ([UNC0025](#))

of any one state. The Ocean Law Specialist Group agreed, noting that while UNCLOS obliges states to preserve and protect the marine environment, it currently “lacks mechanisms to protect fragile, biodiverse and ecologically important areas of the ocean”.²¹⁵

167. Developing a network of MPAs in areas beyond national jurisdiction is one of the goals of a proposed implementing agreement to UNCLOS on the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction to UNCLOS (‘BBNJ Agreement’). Areas beyond national jurisdiction refers to both the high seas and the ‘Area’—the deep seabed below.²¹⁶
168. The agreement will also consider the related issues of the exploitation of marine genetic resources (MGRs) in areas beyond national jurisdiction. MGRs are materials from living organisms, such as plants, algae, animals or microbes, that have “actual or potential value”.²¹⁷ Some states think that these resources should be considered the ‘common heritage of humankind’, so that all states can share their economic and social benefits.²¹⁸ This principle is already applied to non-living resources in the Area, and the exploitation of these resources is regulated by the International Seabed Authority.²¹⁹ However, other states are of the view that under the “freedom of the high seas’ principle, all states should be free to exploit living resources in the high seas and on the seabed without restriction. This is a key tension in the negotiations.²²⁰
169. The FCDO told us it “supports the conclusion of an ambitious BBNJ Agreement as soon as possible” and that such an agreement would be “necessary” to achieve the 30by30 target.²²¹ Andrew Murdoch told us that despite delays in the negotiations, the UK has been engaged in intersessional work and been playing a “leading role in bringing together different delegations and different interest groups to help to achieve, outside the formal negotiation process, a consensus”.²²² The Minister told us that one of the UK’s key goals in the run up to second session of CBD COP15 is to increase support for marine sustainability and finance, which is why it has recently launched the £500 million Blue Planet Fund.²²³

215 Written evidence from the Ocean Law Specialist Group (UNC0042). See also written evidence from Professor Robin Churchill and Dr Jacques Hartmann (UNC0011).

216 David S Berry, ‘Unity or Fragmentation in the Deep Blue: Choices in Institutional Design for Marine Biological Diversity in Areas Beyond National Jurisdiction’, *Frontiers in Marine Science*, vol. 8, 2021: <https://www.frontiersin.org/articles/10.3389/fmars.2021.761552/full> [accessed 7 February 2022]

217 United Nations Convention on Biological Diversity, Article 2: <https://www.cbd.int/convention/articles/?a=cbd-02> [accessed 7 February 2022]

218 David S Berry, ‘Unity or Fragmentation in the Deep Blue: Choices in Institutional Design for Marine Biological Diversity in Areas Beyond National Jurisdiction’, *Frontiers in Marine Science*, vol. 8, 2021: <https://www.frontiersin.org/articles/10.3389/fmars.2021.761552/full> [accessed 7 February 2022]. See also written evidence from Dr Philipp Kastner (UNC0029).

219 Agreement Relating to the Implementation of Part XI of UNCLOS: https://www.un.org/depts/los/convention_agreements/texts/unclos/closindxAgree.htm [accessed 7 February 2022]

220 Written evidence from Joanna Szuminska (UNC0034) and Professor Abbe Brown et al. (UNC0035)

221 Written evidence from the FCDO (UNC0028)

222 Q 97 (Andrew Murdoch)

223 Q 105 (Lord Goldsmith of Richmond Park)

170. However, some witnesses were sceptical that the agreement would go far enough. The Pew Charitable Trusts told us that:

“Governments, including the UK, seem hesitant to vest the new Treaty with the full set of policy tools required for the challenge. A future Treaty needs to have the ability for its Parties to directly adopt Marine Protected Areas with legally binding associated management measures, rather than relying solely on the existing patchwork of bodies to conserve high seas biodiversity... Without this ability the Treaty ... would only be able to designate “paper parks”, [which] risk[s] turning the implementation of [the 30by30] target into an accounting exercise with limited impact on the water.”²²⁴

They also noted that some Governments have been “pushing to exclude fisheries from the scope of the Treaty in its entirety”, which would be a “disaster”.²²⁵

171. **The Government should continue to support the ongoing negotiations for the BBNJ Agreement and work to ensure that the obligations of states are not diluted. This will be vital for ensuring the 30by30 target can be met. The Government will need to engage with states which are reticent to expand the marine protected area network.**
172. **We commend the Government for the Blue Belt Programme, but it should provide further support for those Overseas Territories more reliant on marine resources for their economies, not least in the areas of control and enforcement.**

224 Written evidence from the Pew Charitable Trusts ([UNC0040](#))

225 Written evidence from the Pew Charitable Trusts ([UNC0040](#)). See also [Q 85](#) (Professor Richard Barnes).

CHAPTER 5: HUMAN RIGHTS AND LABOUR PROTECTIONS AT SEA

173. Professor Haines told us that at any one time there are more than 30 million people at sea.²²⁶ Most (27 million) are fishers, while 1.6 million are employed in the global shipping industry (merchant seafarers). Other users of the sea include offshore oil and gas workers, migrants, refugees, asylum seekers, trafficking victims, and crew and passengers on board cruise ships.
174. UNCLOS includes some provisions relating to the conditions of people at sea and which have an impact on their human rights. Judge Anderson told us that these include Article 98 (the duty to render assistance to those in peril at sea), Article 73 (which limits coastal states' ability to use imprisonment or other forms of corporal punishment for fishing offences) and Article 292 (which provides for the prompt release of arrested vessels and their crews against a bond).²²⁷ Andrew Murdoch added that it also includes prohibitions on the transport of slaves (Article 99).²²⁸
175. However, witnesses agreed there are significant gaps in the protection of human rights at sea, including in UNCLOS's provisions, because it was developed "before and outside the influence of international human rights law".²²⁹ Professor Papanicolopulu and colleagues wrote: "UNCLOS is drafted as if people did not exist at sea, but only vessels, resources and marine species."²³⁰ Similarly, Professor Evans told us that one of UNCLOS's "huge flaws" is that it has "more to say about protecting fish than about protecting people".²³¹

The application of international human rights law at sea

176. Witnesses were clear that international human rights law applies to those at sea as well as on land. Professor Klein explained that: "there was a point in time where some countries did not consider that their human rights obligations extended out to sea once they were beyond their land territory, but that position has been firmly quashed at this stage."²³²
177. Some suggested that there might not be a need to add human rights provisions directly into UNCLOS, as its framework nature means that more specific regulation can be developed by competent organisations such as the IMO.²³³ Some treaties have attempted to improve the conditions of people at sea. These include the IMO's International Convention on Safety of Life at Sea (SOLAS) and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), the International Convention on Maritime Search and Rescue (SAR) and the International Labour Organization's Maritime Labour Convention (MLC).²³⁴ But these are not human rights treaties.

226 Written evidence from Professor Steven Haines ([UNC0037](#))

227 Written evidence from Judge David Anderson ([UNC0045](#))

228 [Q 55](#) (Andrew Murdoch)

229 Written evidence from Professor Richard Barnes and Professor Elizabeth Kirk ([UNC0015](#))

230 Written evidence from Professor Irini Papanicolopulu, Andrea Longo and Daniele Mandrioli ([UNC0033](#))

231 [Q 13](#) (Professor Sir Malcolm Evans). See also written evidence from Human Rights at Sea ([UNC0016](#)).

232 [Q 26](#) (Professor Natalie Klein). See also [Q 82](#) (Professor Anna Petrig).

233 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#)). See also written evidence from Human Rights at Sea ([UNC0016](#)).

234 See also written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#))

178. We heard that there is still some uncertainty about how human rights laws should apply to those at sea in practice. Professor Petrig told us this has come about because:

“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 that have been refined through many efforts by many actors are mainly for a land context and not for the sea.”²³⁵

She added that the lack of attention to human rights in the maritime context is reflected in the fact there is only one NGO that deals with the rights of people at sea (the UK-based charity Human Rights at Sea), compared to hundreds focused on human rights on land.²³⁶

179. As a result, there are “mismatches between the jurisdictional regimes for the law of the sea and the protection of human rights”.²³⁷ Jessica Schechinger, PhD Candidate in International Law and Graduate Teaching Assistant at the University of Glasgow’s School of Law, told us that the roles and obligations of states are not “clear cut”, particularly “if the state involved is not the flag state, and does not have a jurisdictional link to (and interest in) the victim of an (alleged) human rights violation”.²³⁸ Professor Petrig added that the expression ‘wholly exceptional circumstances [reign at sea]’, used by the European Court of Human Rights,²³⁹ has been used to “justify a more lenient standard at sea compared with the one applied on land”. However, in her view “these wholly exceptional circumstances could in specific situations require that we adhere to a stricter standard than on land,” as the “hostile environment” at sea makes people “particularly vulnerable”.²⁴⁰
180. Human Rights at Sea told us that a core challenge is the “the fragmented nature of international law and the absence of a dedicated legal regime that unifies international human rights, refugee, labour, and law of the sea provisions”.²⁴¹ Dr Kastner agreed, saying there is a need for the existing legal obligations to be clarified, “from the general applicability of international human rights law on the high seas to more specific issues, such as what the obligation to deliver those rescued to a ‘place of safety’ implies”.²⁴²
181. The Government has acknowledged that these complexities exist. In a follow-up letter to our evidence session, the Minister told us that the Government recognises there are “challenges around upholding human rights for those working away from home ... in view of the jurisdictional complexities that exist at sea”.²⁴³ The Minister did not explain how the UK Government intends to address such jurisdictional complexities.

235 Q 82 (Professor Anna Petrig)

236 *Ibid.*

237 Written evidence from Professor Richard Barnes and Professor Elizabeth Kirk (UNC0015)

238 Written evidence from Jessica Schechinger (UNC0043)

239 See for example the *Rigopoulos v. Spain* case (application number 37388/97, ECHR, 12 January 1999) and the *Medvedyev and others v. France* case (application number 3394/03, ECHR, 29 March 2010). See more: Anna Petrig, *Human Rights and Law Enforcement at Sea: Arrest, Detention and Transfer of Piracy Suspects*, (Leiden, Brill Nijhoff, 2014) pp 271–274 (The Right to ‘Prompt’ Judicial Control).

240 Q 82 (Professor Anna Petrig)

241 Written evidence from Human Rights at Sea (UNC0016). See also Q 82 (Professor Anna Petrig).

242 Written evidence from Dr Philipp Kastner (UNC0029)

243 Letter from Lord Goldsmith of Richmond Park to the Chair of the International Relations and Defence Committee (11 January 2022): <https://committees.parliament.uk/publications/8554/documents/86402/default/>

182. A further challenge is the enforcement of human rights law at sea. We heard that the issue is twofold. First, as discussed in paragraph 39, exclusive flag state jurisdiction, while intended to be a mechanism to provide for jurisdiction and accountability on the high seas, has instead led to a “jurisdictional vacuum”, in part due to the widespread use of flags of convenience.²⁴⁴ Human Rights at Sea said that the system of exclusive flag state jurisdiction and flags of convenience is “one of the single most significant barriers to transparency as to the scale of human, labour and social rights abuses at sea”.²⁴⁵
183. States should enact domestic legislation to ensure they can meet their obligations under UNCLOS and international human rights law. Human Rights at Sea told us this legislation must be “sufficient to empower the local courts to punish any individual or entity liable for any human rights violations.” But in practice, many states do not enact this legislation, or are unwilling or unable to police or enforce it, and shipowners can choose to register with flags of convenience.²⁴⁶
184. Professor Papanicolopulu and colleagues added that even where states have the appropriate domestic legislation in place, it is “often impossible” to enforce it, “given that a ship may navigate anywhere in the world, far away from the territory and the patrol vessels of its flag State.”²⁴⁷ Professor Guilfoyle agreed, saying that the oceans provide “a lot of space to hide relative to the enforcement capacity represented by the world’s navies and coastguards”, comparing it to “attempting to police a city like London or New York with half a dozen patrol vehicles.”²⁴⁸
185. Second, we heard that the way UNCLOS establishes jurisdiction in its zonal approach is at odds with that of international human rights law. Dr Galani told us that: “The fact that a person falls within the jurisdiction of a state for human rights purposes does not mean that that state can exercise jurisdiction under the law of the sea.”²⁴⁹ She gave the following example:
- “If a Liberia-flagged vessel navigates through the territorial waters of the UK and there are victims of human trafficking onboard, the victims fall within the UK’s jurisdiction for human rights purposes but this does not mean that the UK has the right to interfere with the right of innocent passage in order to do something and protect the victims on board, unless the UK considers that human rights violations are a threat to the peace, security and good order of the coastal state.”²⁵⁰
- Both Dr Galani and Professor Evans said that the primacy of the principles of freedom of navigation and exclusive flag state jurisdiction within UNCLOS, while important, hinder the applicability of human rights law at sea.²⁵¹
186. There is also a lack of procedural remedies for individuals to invoke the protection of their rights. Professor Papanicolopulu and colleagues highlighted

244 [Q 81](#) (Professor Anna Petrig)

245 Written evidence from Human Rights at Sea ([UNC0016](#))

246 Written evidence from Professor Irini Papanicolopulu, Andrea Longo and Daniele Mandrioli ([UNC0033](#)). See also [Q 82](#) (Professor Anna Petrig) and [Q 27](#) (Professor Natalie Klein).

247 Written evidence from Professor Irini Papanicolopulu, Andrea Longo and Daniele Mandrioli ([UNC0033](#))

248 [Q 82](#) (Professor Douglas Guilfoyle)

249 [Q 27](#) (Dr Sofia Galani). See also written evidence from Jessica Schechinger ([UNC0043](#)).

250 [Q 27](#) (Dr Sofia Galani)

251 [Q 27](#) (Dr Sofia Galani) and [Q 13](#) (Professor Malcolm Evans)

that UNCLOS's dispute settlement mechanisms are only available to states. They added that "due to the nature of their very activity, victims of human rights abuses at sea may hardly be able to bring a case against their oppressors (individuals or State) before domestic or international courts, and when they managed to do so, this usually takes years and years."²⁵²

187. Finally, we heard that states, including the UK, have a narrow view of human rights at sea as pertaining to labour protections, ignoring other contexts, such as recreation, military, or migration, in which human rights abuses occur.²⁵³ Human Rights at Sea told us that the UK Government holds a "flawed perception that the protection of human rights at sea concerns only its labour obligations".²⁵⁴ Dr Galani agreed, highlighting a recent debate in the House of Lords,²⁵⁵ where the Government responses focused on compliance with the Maritime Labour Convention and the Work in Fishing Convention, with little reference to the broader context of human rights for all persons at sea.²⁵⁶
188. Further, witnesses questioned the effectiveness of the present regulation of labour conditions at sea. Professor Papanicolopulu and colleagues highlighted that, while "successful", the Maritime Labour Convention "excludes fishers and people working on platforms, installations and other structures at sea" and that the Work in Fishing Convention has only been ratified by only 19 States and does not apply to small fishing vessels, which account for many of the vessels that provide fish for the British market. They said it is necessary to "draft, adopt and implement international treaties which will regulate working and living conditions for all categories of workers at sea".²⁵⁷
189. A letter sent by the Minister following his evidence session further suggested that the Government has a narrow view of human rights at sea.²⁵⁸ The Minister referred largely to human rights concerns facing those working at sea, through reference to the Work in Fishing Convention and the Maritime Labour Convention. The letter does not clarify that human rights obligations apply to all people at sea in all contexts, or highlight any ways in which the Government is working to uphold these obligations.
190. **UNCLOS has little to say about human rights. Nonetheless, it is clear that international human rights law applies to people at sea. But there are barriers to the application of human rights at sea in practice. The Government acknowledged the existence of these barriers, but did not say how it intended to address them.**
191. **We ask that in its response to this report, the Government confirms that it considers international human rights law to apply equally at sea as it does on land, and to commit to taking a clear and unequivocal position on this both domestically and internationally.**

252 Written evidence from Professor Irini Papanicolopulu, Andrea Longo and Daniele Mandrioli ([UNC0033](#))

253 Written evidence from Human Rights at Sea ([UNC0016](#))

254 *Ibid.*

255 HL Deb, 22 June 2021, [cols 130–133](#)

256 [Q 29](#) (Dr Sofia Galani)

257 Written evidence from Professor Irini Papanicolopulu, Andrea Longo and Daniele Mandrioli ([UNC0033](#))

258 Letter from Lord Goldsmith of Richmond Park to the Chair of the International Relations and Defence Committee (11 January 2022): <https://committees.parliament.uk/publications/8554/documents/86402/default/>

192. **We urge the Government to acknowledge that human rights at sea include a wide range of rights, and not just those pertaining to labour conditions, important though these are. In its response to us, we ask that the Government sets out what it considers its obligations to be concerning human rights at sea, including with reference to human trafficking and modern slavery.**
193. **The principle of exclusive flag state jurisdiction and the issue of flags of convenience poses a challenge to the effective monitoring and enforcement of human rights at sea. We reiterate our request for the Government to provide more detail on its review of this issue.**

Specific challenges in the 21st century

194. Witnesses noted that some specific challenges have emerged or intensified since UNCLOS was drafted. These highlight the weaknesses in the application of international human rights law to seafarers under the current system.

Migration by sea

195. We heard that mass migration by sea is now occurring on a scale not anticipated at the time UNCLOS was drafted.²⁵⁹ Those migrating by sea include irregular migrants (broadly defined as a person who lacks a legal right to be in their destination country), victims of modern slavery and human trafficking, refugees and asylum seekers.²⁶⁰ Human Rights at Sea told us there are currently around “82.4 million forcibly displaced persons”, and of those “26.4 million are refugees many of whom cross the Mediterranean Sea, the Pacific Ocean, the Andaman Sea, and the English Channel fleeing persecution and harm.”²⁶¹
196. The methods of migration by sea have also changed. Professor Klein told us that migration by sea now frequently involves unseaworthy vessels, which means lives are increasingly at risk.²⁶² Amnesty International UK said that: “Every year many people die on journeys that have not been authorised by States, are facilitated by people smugglers or controlled by human traffickers.”
197. Article 98 of UNCLOS obliges states to require ships flying their flags to “render assistance to any person found at sea in danger of being lost” and “proceed with all possible speed to the rescue of persons in distress”.²⁶³ States are also required to “promote the establishment, operation and maintenance of an adequate and effective search and rescue service”. Dr Kastner explained that these duties are further specified in the International Convention for the Safety of Life at Sea (SOLAS) and the International Convention on Maritime Search and Rescue (SAR).²⁶⁴ These duties apply to vessels wherever they are at sea.
198. States also have obligations to provide asylum to those fleeing persecution and to not return refugees to a place where their life or liberty is at risk (known

259 **Q 26** (Professor Natalie Klein)

260 Written evidence from Human Rights at Sea (**UNC0016**)

261 *Ibid.*

262 **Q 26** (Professor Natalie Klein)

263 United Nations Convention on the Law of the Sea (UNCLOS), Article 98: https://www.un.org/depts/los/convention_agreements/texts/unclos/closindx.htm [accessed 7 February 2022]

264 Written evidence from Dr Philipp Kastner (**UNC0029**). See also written evidence from Amnesty International UK (**UNC0019**).

as ‘non-refoulement’). These principles are enshrined in international agreements including the 1951 UN Convention relating to the Status of Refugees, the 1950 European Convention on Human Rights and the 2005 Council of Europe Convention on Action against Trafficking in Human Beings.²⁶⁵

199. Despite the increase in risky journeys made by sea, and the obligations on states outlined above, we heard that states tend to treat mass migration by sea as a maritime security and immigration issue. Professor Klein explained that under the Protocol against the Smuggling of Migrants by Land, Sea and Air states do have powers to “police migrant smuggling at sea”. However, she said that “just because an issue relates to maritime security does not mean that human rights obligations no longer apply” and highlighted that Article 19 of the Migrant Smuggling Protocol says that “states’ rights and duties remain subject to international human rights law and the refugee convention and its protocols.” This means that: “States are not supposed to pick and choose which legal regime they follow in this situation; they must accept that human rights obligations apply.”²⁶⁶
200. Nevertheless, we heard that in practice, obligations such as the duty to render assistance are often side-lined.²⁶⁷ For example, Professors Barnes and Kirk explained that while states have “no obligation to allow vessels carrying irregular migrants into their ports”, they do have a duty to receive vessels that are in distress, and as such “states may deliberately avoid providing immediate and vital assistance to persons in distress because this may incur more costly duties to receive persons in distress.”²⁶⁸ Professor Papanicolopulu and colleagues agreed, saying there is sometimes an “active disregard for the duty to save lives at sea”.²⁶⁹
201. Amnesty International UK were particularly concerned by provisions in the Nationality and Borders Bill, currently before Parliament, which “empower officials to ‘stop, board, divert and detain’ vessels used in navigation”,²⁷⁰ and by recent statements made by the Home Secretary that suggest the UK will “seek to turnaround and push back boats at sea”.²⁷¹ They argued that ‘turnaround’ policies are not compatible with Article 98 and “duties to promote cooperation between states” and as many of the vessels in question are “overcrowded, unstable or otherwise unsuitable”, nor are they compatible with “obligations to people in immediate need of being disembarked safely”. They concluded that: “Ministers’ current or intended immigration policy ... is liable to offend international law, encourage wider disrespect for that law and the value of human life that underpins it.”²⁷²

265 Written evidence from Amnesty International UK ([UNC0019](#))

266 [Q 26](#) (Professor Natalie Klein)

267 *Ibid.*

268 Written evidence from Professor Richard Barnes and Professor Elizabeth Kirk ([UNC0015](#))

269 Written evidence from Professor Irimi Papanicolopulu, Andrea Longo and Daniele Mandrioli ([UNC0033](#)). See also written evidence from Dr Philipp Kastner ([UNC0029](#)).

270 Schedule 6 (Maritime Enforcement) of the Nationality and Borders Bill amends Part 3A of the Immigration Act 1971 (maritime enforcement). Where a “relevant officer has reasonable grounds to suspect that— (a) a relevant offence is being, or has been, committed on the ship, or (b) the ship is otherwise being used in connection with the commission of a relevant offence”, it gives the relevant officer the power to “(a) stop the ship; (b) board the ship; (c) require the ship to be taken to any place (on land or on water) in the United Kingdom or elsewhere and detained there; (d) require the ship to leave United Kingdom waters”. [Nationality and Borders Bill](#), Schedule 6 [Bill 82 (2011–22)]

271 Written evidence from Amnesty International UK ([UNC0019](#))

272 *Ibid.*

202. Other parliamentary committees have expressed similar concerns. In their second Report on the Nationality and Borders Bill, the Joint Committee on Human Rights stated that:

“The Government’s legislation and policy intentions with regard to pushbacks at sea are likely to increase the danger of these crossings whilst failing to deter those who make the journey and people smugglers who profit from them. We do not see how the Government’s proposals as they stand are consistent with our human rights obligations.”²⁷³

Further, in a letter to the Home Secretary in December 2021 the Justice and Home Affairs Committee questioned the ‘turnaround’ policy’s compatibility with Article 98, saying that with consideration to “the fragility of the vessels concerned; weather and sea conditions; the vulnerability of the passengers; overloading; the absence in most instances of anyone with experience in charge of the vessel; and the large number of large vessels using this busy shipping route”, it is “hard to imagine a situation where boats carrying migrants are not found to be ‘in danger at sea’”.²⁷⁴

203. The Minister told us that the UK takes its obligations under Article 98 of UNCLOS “very seriously”. He said that: “Whatever solutions, proposals and policies will be brought forward in the next couple of weeks ... must not be at the expense of our commitments internationally” and that “there is no suggestion from anyone that those obligations are not of paramount importance.”²⁷⁵ Similarly, on January 20 2022, Baroness Goldie, Minister of State at the Ministry of Defence, told the House of Lords that “whatever the MoD does in its primacy of operational control, discharge of that duty will absolutely be done in compliance with international laws and the United Nations Convention on the Law of the Sea.”²⁷⁶ On 17 January 2022 it was reported that the Royal Navy is set to take charge of operations over the English Channel, providing support to the Border Force. Details about the exact involvement of the Royal Navy have not been made public at the time of writing of this report.²⁷⁷
204. **Migration at sea is increasingly undertaken by vulnerable groups, including refugees and asylum seekers, in unseaworthy vessels which frequently need emergency assistance. Under UNCLOS states have a duty to render assistance to persons in distress at sea, but this obligation is increasingly side-lined by security and immigration policies.**
205. **Despite the Minister’s assurances, we are not convinced that provisions relating to maritime migration and ‘turnaround tactics’ in the Nationality and Borders Bill are compliant with the UK’s duties under UNCLOS, in particular Article 98. We therefore ask that in its response to this report, the Government provides us with a full assessment of the compatibility of the provisions in the Nationality**

273 Joint Committee on Human Rights, *Legislative Scrutiny: Nationality and Borders Bill (Part 3) - Immigration offences and enforcement* (Ninth Report, Session 2021–22, HC 885, HL Paper 112)

274 Letter from the Justice and Home Affairs Committee to Rt Hon Priti Patel MP, Home Secretary, (8 December 2021): <https://committees.parliament.uk/publications/8134/documents/83394/default/>

275 **Q 114** (Lord Goldsmith of Richmond Park)

276 HL Deb, 17 January 2022, [col 1770](#)

277 BBC News, ‘Channel migrants: Armed forces set to take over English Channel operations’, (17 January 2022): <https://www.bbc.co.uk/news/uk-60021252> [accessed 7 February 2022]

and Borders Bill dealing with so-called forced turnarounds with the UK's international responsibilities under Article 98 of UNCLOS.

Forced labour and excessive work conditions

206. Witnesses told us that those working at sea are increasingly subject to human rights abuses. Professor Papanicolopulu and colleagues explained that the majority of these workers are fishers, often migrant workers, and that they are “often subject to the most terrible working conditions, in some cases amounting to forced labour, slavery and torture”.²⁷⁸ The second largest group working at sea are merchant seafarers. Human Rights at Sea told us that many merchant seafarers are subject to “sub-standard working conditions” and made to work “excessively under extended contracts beyond the 11-month legislative maximum”.²⁷⁹ Professor Papanicolopulu and colleagues wrote that fishing and shipping “remain the two most dangerous occupations worldwide” and that “fatal incidents are commonplace even in the UK” at rates much higher than other occupations.²⁸⁰
207. These issues are compounded by illegal, unreported and unregulated (IUU) fishing, which is estimated to account for around 30 per cent of catches.²⁸¹ Dr Caddell explained the link between IUU and human rights abuses:
- “Behaviourally, it is a pretty obvious picture. If you know that somebody is getting this illegal windfall, more boats will follow and it erodes trust in the fishery. Fishing vessels that have very little interest in the requirements and niceties of getting a licence probably have very little interest in the niceties and requirements of labour and human rights elements”.²⁸²
208. IUU fishing is in turn facilitated by flags of convenience and the subsequent lack of monitoring and enforcement on the high seas. The Environmental Justice Foundation told us that a 2018 study found that “70 per cent of vessels involved in IUU fishing were, or had been, flagged in a ‘tax haven’ jurisdiction”.²⁸³ Greenpeace UK told us that the lack of monitoring and enforcement, coupled with overfishing, forces vessels to “fish further offshore and for longer periods of time” and “increase[s] the possibility of exploitation of migrant fishers”.²⁸⁴
209. We heard that these abuses have been facilitated by the practice of ‘bunkering’—the refuelling of vessels at sea. Professor Klein told us that bunkering was “in its nascence at the time UNCLOS was drafted”, but that now “vessels can stay on the high seas sometimes for years at a time”.²⁸⁵ She said that this has led to the “long term detention of fishers onboard ships”.²⁸⁶

278 Written evidence from Professor Irini Papanicolopulu, Andrea Longo and Daniele Mandrioli ([UNC0033](#)). See also written evidence from Human Rights at Sea ([UNC0016](#)).

279 Written evidence from Human Rights at Sea ([UNC0016](#))

280 Written evidence from Professor Irini Papanicolopulu, Andrea Longo and Daniele Mandrioli ([UNC0033](#))

281 [Q 33](#) (Dr Richard Caddell)

282 *Ibid.*

283 Written evidence from the Environmental Justice Foundation ([UNC0036](#))

284 Written evidence from Greenpeace UK ([UNC0025](#))

285 [Q 26](#) (Professor Natalie Klein)

286 *Ibid.*

Bunkering also limits the effectiveness of port state controls, which are increasingly used to try to address IUU fishing.²⁸⁷

210. The rights of labourers at sea are addressed by international agreements including the Maritime Labour Convention and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, developed under the International Labour Organization (ILO) and IMO respectively. Nautilus International told us that in recent years there has been “excellent cooperation” between the IMO and the ILO, including the development of the Joint IMO/ILO Guidelines on the Fair Treatment of Seafarers in the Event of a Maritime Accident.²⁸⁸
211. But we heard that, once again, the widespread use of flags of convenience means that such agreements and guidelines are difficult to enforce in practice. Professor Evans said: “At the end of the day, if a vessel is registered in a state that is not interested in achieving compliance with human rights commitments, people on board those vessels will be extremely vulnerable.”²⁸⁹
212. Likewise, Nautilus International highlighted the problem of flag states failing to establish a genuine link with vessels using their flag, as discussed in Chapter 3. This means that states are “unable to exercise effective jurisdiction and control” when there are human rights abuses on board those vessels. They thought that the lack of definition of what constitutes a genuine link under Article 92 of UNCLOS is a “serious weakness”, as it allows shipowners to register with states “with which they have no or little connection, to avoid taxes, social security payments” and where seafarers may not be able to access employment rights. Nautilus International concluded:
- “The overall result for seafarers is that they: are not subject to the human rights legislation or the general employment rights of the flag State; they gain nothing by way of social security from the flag State; when they are abandoned in a foreign country, or are subject to unjust criminalisation, the flag State has no interest in coming to their aid.”²⁹⁰
213. Andrew Murdoch acknowledged that there are “difficult parts of the sector to reach, particularly the smaller vessels, to ensure compliance”. However, he told us that the Maritime Labour Convention provides an “inspection framework” which “allows flag and port states to identify particular areas of concern, particularly labour exploitation and modern slavery, which can then be referred to the relevant authorities”, which for the UK is the Maritime Coastguard Agency. He added that the Government “recognises ... the difficulty of upholding some of those rights and standards”, particularly for seafarers “working far from home and beyond visibility”, but that the UK is involved in initiatives to combat these issues, including the Neptune Declaration on Seafarer Wellbeing and Crew Change.²⁹¹
214. **Forced labour and excessive working conditions are increasing concerns for those working at sea in the fishing and shipping industries. While there are international agreements for the**

287 Written evidence from Professor Irini Papanicolopulu, Andrea Longo and Daniele Mandrioli ([UNC0033](#))

288 Written evidence from Nautilus International ([UNC0024](#))

289 [Q 14](#) (Professor Sir Malcolm Evans)

290 Written evidence from Nautilus International ([UNC0024](#))

291 [Q 55](#) (Andrew Murdoch)

protection of labourers' human rights, the flag state system again stymies their enforcement and realisation in practice.

Physical and sexual crimes at sea

215. We heard several examples of situations where the victims of physical or sexual crimes at sea had difficulty accessing justice. This is a problem for passengers on cruise ships. We heard that jurisdictional issues and the use of flags of convenience are factors which compound the problem. Human Rights at Sea told us that:
- “Crimes committed on board cruise ships, including sexual assaults, are rarely investigated by competent authorities and, frequently occur in situations that are jurisdictionally confusing. Many victims are denied justice in the wake of the abuse to which they have been subjected.”²⁹²
216. Professor Haines gave the example of an alleged sexual assault of a British teenager by an Italian man on board a cruise ship in 2019. The ship was registered in Panama, a prominent flag of convenience, and was sailing outside of territorial waters in the Mediterranean.²⁹³ He told us that the crime was investigated by the Spanish authorities and put before a Spanish court, but that they “dismissed the case because it did not have jurisdiction.” There has been “no effective remedy” for the victim, because Panama—though in possession of flag state jurisdiction over the vessel—“will not do anything about it” and “is not in a position to do anything about it”. Professor Haines told us he was not aware that the Italian, British or Panamanian Governments have done “anything at all to produce a remedy” for the victim.²⁹⁴
217. Jessica Schechinger told us that such incidents are “unfortunately, not uncommon” and that the “lack of effective remedy is a problem in several other contexts as well”, including crimes committed by privately contracted armed security personnel (PCASP).²⁹⁵ She explained that using PCASP to protect against piracy has become “accepted practice”, and they are “extremely effective in deterring piratical acts.” However, there have been incidents where (alleged) pirates and fishers mistaken for pirates have been harmed or killed by PCASP, including a 2021 incident where it is estimated 12 people were killed.
218. Jessica Schechinger told us that while several states “could have exercised jurisdiction” with regard to such incidents, they have not been investigated and “no one has been held accountable” for any known incidents. Again, we heard that the obligations of states when human rights abuses occur at sea are “not ... clear cut”, particularly “if the state involved is not the flag state and does not have a jurisdictional link to (and interest in) the victim of an (alleged) human rights violation.” She highlighted that the use of PCASP is not regulated by UNCLOS and has not been sufficiently regulated by the IMO. She thought that: “Addressing the regulation of PCASP within the IMO would remove (some of) the legal uncertainties and could clarify the rights and obligations of states under international law, in case PCASP related incidents occur.”²⁹⁶

292 Written evidence from Human Rights at Sea ([UNC0016](#))

293 [Q 7](#) (Professor Steven Haines)

294 *Ibid.*

295 Written evidence from Jessica Schechinger ([UNC0043](#))

296 *Ibid.*

219. **Victims of human rights abuses at sea, including victims of physical and sexual crimes, do not have sufficient access to timely or effective justice. Their situation is exacerbated by complex questions concerning legal jurisdiction and the flag state’s responsibility to investigate and prosecute human rights abuses committed at sea. The obligations of third states to exercise jurisdiction over these abuses and crimes are also not clear: states appear to use the principle of exclusive flag state jurisdiction to avoid intervening on behalf of victims, even if the abuse takes place within their maritime jurisdiction. As a result, victims of human rights abuses at sea are denied access to an effective remedy.**
220. **The increased use of privately contracted armed security personnel has been effective at deterring piracy, but there have been examples of these contractors harming and killing fishers and alleged pirates. Privately contracted armed security personnel are poorly regulated, and individuals are rarely held accountable for such crimes.**

Possible solutions

221. We heard a range of possible ways in which the protection of human rights at sea could be strengthened. First, witnesses including Nautilus International advocated for the strengthening of the requirement for a genuine link between a ship and flag state in UNCLOS.²⁹⁷ Human Rights at Sea agreed, saying that “more stringent regulation for the open registries that would hold the flag state accountable for human rights abuses on board vessels flying its flag must be examined and implemented at IMO level.”²⁹⁸
222. Second, port state measures could be strengthened to bring human rights abuses that occur at sea under the jurisdiction of states where the ship docks. Professor Klein told us that port state controls are already being used to address marine pollution, and that the Food and Agriculture Organization’s 2009 Agreement on Port State Measures²⁹⁹ is similarly trying to address IUU fishing. But port state controls have yet to be extended to human rights. When discussing human rights Andrew Murdoch told us that port state control is an “important element”, and the UK is “strongly supportive” of the measures that have been advanced so far.³⁰⁰
223. However, Professor Papanicolopulu and colleagues noted that “wrongdoing vessels may easily evade port state controls”, by using ‘ports of convenience’ or, for fishing vessels, through the practice of bunkering.³⁰¹ While they praised the 2009 Port State Measures Agreement for its “recognition of port states’ potential to deter and eliminate IUU fishing” they said that it “does not give port states the right and obligation to adopt enforcement measures such as investigations, judicial proceedings and sanctions, which rest with flag States’ powers”. Further, as few states have ratified the agreement, “complementary action is ... needed”.³⁰²

297 Written evidence from Nautilus International ([UNC0024](#))

298 Written evidence from Human Rights at Sea ([UNC0016](#))

299 Food and Agriculture Organization of the United Nations, *Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing: Revised Edition*: <https://www.fao.org/port-state-measures/resources/detail/en/c/1111616/> [accessed 7 February 2022]

300 [Q 55](#) (Andrew Murdoch)

301 Written evidence from Professor Irini Papanicolopulu, Andrea Longo and Daniele Mandrioli ([UNC0033](#)). See also [Q 82](#) (Professor Douglas Guilfoyle).

302 Written evidence from Professor Irini Papanicolopulu, Andrea Longo and Daniele Mandrioli ([UNC0033](#))

224. Professor Guilfoyle suggested that more states could follow the example of the US State Department, which produces an annual ‘Trafficking in Persons’ report. He told us this has become a “significant tool of soft power in US diplomacy” and is effective as “no state wants to be identified as having a trafficking problem.” He suggested a similar initiative for human rights at sea, including sanctions for “renegade actions”, and thought that the Magnitsky Act legislation could be used for that purpose.
225. Third, states, including the UK, should ensure that their domestic legislation reflects their international human rights obligations.³⁰³ The concerns raised by Amnesty International UK about the Nationality and Borders Bill suggest that the UK Government needs to do more to ensure national security and immigration policies do not side-line human rights obligations.³⁰⁴
226. Fourth, some witnesses advocated for mechanisms for individuals to settle disputes against non-state actors, such as businesses and shipowners. Human Rights at Sea explained the issues with the current system:
- “At the UN level, most human rights treaties provide for monitoring and enforcement through established committees. These committees can hear individual complaints against a state party. The issue with these quasi-judicial fora is that they require the consent of the state to hear individual communications and that their admissibility criteria require that the applicant exhausts domestic remedies available, that are often non-existent or non-effective. The costs to the applicants are high and it can take up from eight to ten years to be awarded compensation for damages.”³⁰⁵
- They argued for “alternative routes to remedy that are more accessible to the victim, faster, and overall victim-sensitive and oriented”. Professor Petrig agreed, suggesting that a “private justice system” of arbitration could be used.³⁰⁶
227. Finally, witnesses were clear that a unified approach is needed that draws all of these solutions together. Professor Evans told us that we need to look beyond “piecemeal solutions” to human rights issues at sea and instead promote a “holistic” understanding of how human rights obligations extend to sea.³⁰⁷ Human Rights at Sea agreed, saying that there is an immediate need for a “complementary and unified application of the various self-contained regimes concerning human rights at sea, including UNCLOS, human rights law, refugee law and labour law standards.”³⁰⁸
228. In 2019, Human Rights at Sea itself developed a soft-law instrument, the Geneva Declaration on Human Rights at Sea, which recalls existing legal obligations and provides guidance for coastal, flag and other states on how to protect, respect and ensure human rights at sea” and “can supplement UNCLOS and fill in the human rights at sea gap, without opening the Convention to re-negotiation.” They urged the UK Government to endorse the framework and become a “global leader” in championing it.³⁰⁹

303 Q 27 (Professor Natalie Klein).

304 Written evidence from Amnesty International UK (UNC0019)

305 Written evidence from Human Rights at Sea (UNC0016)

306 Q 82 (Professor Anna Petrig)

307 Q 14 (Professor Sir Malcolm Evans)

308 Written evidence from Human Rights at Sea (UNC0016)

309 *Ibid.*

229. We also heard that UNCLOS should be seen as part of the solution, not the problem, and that it can provide a starting point from which further developments can take place.³¹⁰ Dr Galani reminded us that “UNCLOS is a living treaty” and that “some of its provisions can be interpreted in the light of the new challenges and problems that we face.” She explained that the International Tribunal for the Law of the Sea, for example, has argued that UNCLOS cannot be applied in a legal vacuum and due consideration has to be given to the protection of human rights, and that “through its jurisprudence, it has strived to protect the rights of persons arrested at sea, and has interpreted some of the provisions of UNCLOS that have to do with the arrest, prompt release and procedural rights of crews arrested at sea in a way that protects their rights.” But she acknowledged that “we will not be able to rely on UNCLOS to deal with human rights violations at sea”, and so other mechanisms also need development.³¹¹
230. One forum for the development of a unified approach to human rights at sea could be the UN Human Rights Council.³¹² Professor Petrig told us that at present: “Monitoring bodies, treaty bodies and the Human Rights Council primarily focus their attention on states’ human rights performance on dry land, and the comprehensive and systematic scrutiny of human rights abuses at sea does not really take place.” Human Rights at Sea also said that the Government should establish a mandate with the UK’s own human rights committee, the Equality and Human Rights Commission, to “look exclusively at compliance with human rights at sea”.³¹³
231. **There are a range of mechanisms the Government should investigate for addressing human rights abuses at sea, including port state controls, sanctions, and private arbitration systems. The Government must also ensure that its own domestic legislation fully reflects its obligations under international human rights law, in particular, the Nationality and Borders Bill.**
232. **Piecemeal solutions will not be sufficient. We call on the Government to work with likeminded partners to advance a unified approach to human rights at sea. This will need to draw together practical solutions to challenges including mass migration, forced labour, physical and sexual crimes, and crimes committed by privately contracted armed security personnel, and must lead to the creation of new mechanisms to address the issue.**

310 Written evidence from Sir Michael Wood QC ([UNC0009](#))

311 [Q 26](#) (Dr Sofia Galani)

312 [Q 27](#) (Dr Sofia Galani and Professor Natalie Klein)

313 Written evidence from Human Rights at Sea ([UNC0016](#))

CHAPTER 6: MARITIME AUTONOMOUS VEHICLES

233. The 21st century has seen the rapid development of autonomous technologies in many sectors, including the maritime sector. Witnesses noted that while maritime autonomous *systems* have been in use for some time, in particular for scientific research,³¹⁴ a new challenge is presented by the emergence of maritime autonomous *vehicles* (MAVs). These replicate many of the functions of traditional vessels, and provide new capabilities for operators.³¹⁵
234. Much of the development of such technologies has been for military purposes, with the US Navy and Royal Navy leading internationally.³¹⁶ Professor Klein and colleagues highlighted several examples of autonomous vehicles already in development or use by the military, including “small vessel swarms”, “Seahunter” (a type of uncrewed surface vehicle developed by the US Defense Advanced Research Projects Agency) and “autonomous missile arsenal vessels”.³¹⁷
235. UNCLOS was drafted at a time when maritime vehicles required a physical crew in order to operate. Many of UNCLOS’s provisions refer to, and place obligations on, the crew of the vessel. For example, Article 94 of UNCLOS requires all ships to be “in the charge of a master and officers who possess appropriate qualifications”. But maritime autonomous vehicles (MAVs) do not need a physical crew in order to operate, and some do not even need a remote crew. Commander Caroline Tuckett, Lead Legal Adviser in International Law at the Royal Navy, explained that vehicles can be classified by four ‘degrees’ of autonomy, as set out by the IMO:
- “Degree 1 is a ship that has some automated systems but still has people on board ... Degree 2 is a capability that can be operated remotely but still has seafarers on board. That could be for safety reasons, for maintenance or for any other reason. Degree 3 is where you operate a vessel remotely but there is nobody on board ... Degree 4 is fully autonomous, which means that a ship is capable of making its own decisions.”³¹⁸
236. MAVs raise classification issues. It is uncertain whether MAVs can be classified as ‘vessels’ (a term used interchangeably with ‘ship’), a warship, or whether they are simply devices or equipment. This is important as many of the rights provided for in UNCLOS, such as the right of innocent passage through territorial seas, apply to ‘ships’. Dr van Logchem also noted that if MAVs are classified as ships, then flag states will be under “numerous obligations”.³¹⁹
237. Witnesses were clear that there is an urgent need for new regulation and guidelines to answer these questions, as “the technology is [currently] moving faster than international law”.³²⁰ Dr Galani told us that the IMO has undertaken a scoping exercise on the use of MAVs, and found that many of

314 Written evidence from the National Oceanography Centre ([UNC0022](#))

315 Written evidence from Professor Natalie Klein, Professor Douglas Guilfoyle, Professor Saiful Karim and Professor Rob McLaughlin ([UNC0003](#))

316 [Q 44](#) (Cdr Caroline Tuckett)

317 Written evidence from Professor Natalie Klein, Professor Douglas Guilfoyle, Professor Saiful Karim and Professor Rob McLaughlin ([UNC0003](#))

318 [Q 41](#) (Cdr Caroline Tuckett)

319 [Q 35](#) (Dr Youri van Logchem)

320 [Q 39](#) (Cdr Caroline Tuckett)

its conventions will need to be updated to “plug the gaps that exist”.³²¹ Cdr Tuckett explained that the IMO is intending to produce a “code” that will plug these gaps and provide specific guidance. However, this will likely not be published until 2028.³²²

238. In the meantime, it is likely that the interpretation of the existing rules by those states already using MAVs, including the UK, will contribute to the establishment of customary international law about their use.

Military use

239. There are many potential applications of MAVs for military purposes. A key benefit of MAVs is that they can be used in situations where crew might be at risk, such as during conflicts or mine clearing. Cdr Tuckett provided examples of vessels the Royal Navy is currently testing for use in reconnaissance, surveying inland ports and harbours, and for identifying and classifying mines on the seafloor.³²³

The Royal Navy’s legal approach

240. Cdr Tuckett told us that MAVs are “not the first time ... that new technology has developed and we have had to make sure that it is in accordance with international law”.³²⁴ Professor Evans agreed, telling us that “the law of the sea has always changed quite dramatically in the light of changing ideas of technology” and that there is “absolutely nothing new about our approach to legal regulation changing as technology changes.”³²⁵
241. In the absence of international agreements and regulation on the use of MAVs, Cdr Tuckett said that the Royal Navy is interpreting the provisions of UNCLOS through the lens of Article 31 of the Vienna Convention on the Law of Treaties. This states that: “A treaty shall be interpreted in good faith in accordance with the ordinary meaning to be given to the terms of the treaty in their context and in the light of its object and purpose.”³²⁶ She explained that while UNCLOS does not include specifics on how to regulate MAVs, “the principle of UNCLOS ... is to provide for freedom of navigation and to demonstrate accountability for vessels operating under the principle of the freedom of navigation”, and that those “principles do not change because the technology has changed”. Therefore, under the Vienna Convention: “We just have to make sure that we apply those principles to our new technology”.³²⁷
242. In practice, Cdr Tuckett said that this has meant adopting a “principle of equivalence” when applying provisions of UNCLOS and related treaties when those provisions assume a vessel is crewed. For example, Rule 5 of the Convention on the International Regulations for Preventing Collisions at Sea says that “a vessel on the high seas must keep a good lookout ‘at all times’, using ‘sight and hearing’ and ‘by all available means’ in the circumstances”. She explained that using the principle of equivalence, the Royal Navy have ensured that “the software used to drive the vessels ... has an ability that is as

321 [Q 28](#) (Dr Sofia Galani)

322 [Q 39](#) (Cdr Caroline Tuckett)

323 [Q 41](#) (Cdr Caroline Tuckett)

324 [Q 39](#) (Cdr Caroline Tuckett)

325 [Q 15](#) (Professor Sir Malcolm Evans)

326 United Nations Vienna Convention on the Law of Treaties Article 10: https://legal.un.org/ilc/texts/instruments/english/conventions/1_1_1969.pdf [accessed 7 February 2022],

327 [Q 39](#) (Cdr Caroline Tuckett)

good as having a human watchkeeper on the bridge.” She noted that “in the absence of definitive regulation we feel that it is the safest way to proceed.”³²⁸

243. When asked whether other states agree with the UK’s approach, Cdr Tuckett said that other navies she has dealt with “broadly ... agree”, but that “most navies are not developing this technology as fast as we are”, apart from the US.³²⁹
244. **The Royal Navy is currently adopting a “principle of equivalence” approach to determine how maritime autonomous vehicles can fit into the existing legal regime. In the absence of international agreement, and as one of the leaders in the development of this technology, this seems a sensible approach and the Royal Navy should be commended for its careful consideration of these issues. The Government should monitor other state’s responses to the Royal Navy’s treatment of its maritime autonomous vehicles, and work with partner states to ensure the changes under discussion at the IMO reflect the sensible approach adopted by the Royal Navy.**

Warship status

245. We heard that an important question for the use of MAVs in the military is whether they can be classified as ‘warships’. The Ministry of Defence explained that: “Under the Law of Naval Warfare only warships may lawfully use offensive force during armed conflict.”³³⁰ These are referred to as ‘belligerent rights’, and they include “kinetic strike, visit board search and seizure, laying mines, amphibious operations against enemy held coast, [and] blockade enforcement.”³³¹ Warships are also granted ‘sovereign immunity’ in UNCLOS, meaning other states are prevented from exercising jurisdiction over them.
246. Warships are defined in Article 29 of UNCLOS as:

“A ship belonging to the armed forces of a State bearing the external marks distinguishing such ships of its nationality, under the command of an officer duly commissioned by the government of the State and whose name appears in the appropriate service list or its equivalent, and manned by a crew which is under regular armed forces discipline.”³³²

It is uncertain if a MAV can be considered a warship as it does not have an officer or a crew.

247. The Ministry of Defence told us that at present, MAVs being trialled by the Royal Navy are being registered as “government vessels on non-commercial service”. Vessels categorised in this way are not afforded belligerent rights, but they do have sovereign immunity, and other rights afforded to ships such as the right to innocent passage. Cdr Tuckett told us that to date there have been 23 vessels with “a form of autonomous capability” registered as such.³³³

328 Q 40 (Cdr Caroline Tuckett)

329 Q 44 (Cdr Caroline Tuckett)

330 Written evidence from the Ministry of Defence (UNC0018)

331 *Ibid.*

332 Written evidence from Professor Natalie Klein, Professor Douglas Guilfoyle, Professor Saiful Karim and Professor Rob McLaughlin (UNC0003); UNCLOS Article 29

333 Q 39 (Cdr Caroline Tuckett)

248. Both Cdr Tuckett and the Ministry of Defence said that classifying MAVs as either warships or government vessels on non-commercial service ensures that there is accountability for their use.³³⁴ The Ministry of Defence explained that Article 29 of UNCLOS “confirm[s] state responsibility for the actions of warships and requires that the state have an accountable system of discipline to control the actions of those who operate them”, and incorporating autonomous vehicles into this regime will help to “regulate their proper use”.³³⁵
249. **Whether maritime autonomous vehicles can be classified as warships or not will have significant implications for their use, including their protection from seizure by other states. In the absence of international regulation, the Royal Navy’s practice has been to register vessels in such a way to emphasise they are state owned and operated, providing them with sovereign immunity while ensuring the state can be held accountable for their actions. As other states begin to develop and use maritime autonomous vehicles, it will be important for the UK to work with like-minded partners to regulate these technologies with reference to these principles. Once again, the Royal Navy’s practical approach to ensuring equivalency with the provisions of UNCLOS is sensible and to be commended.**

Cybersecurity considerations

250. We asked witnesses whether cybersecurity was a concern for MAVs. Cdr Tuckett explained that the software used on MAVs developed by the Royal Navy goes through “rigorous testing” and that “it takes a long time to get a vessel certified to the point where we will even let it go into remote-control mode, let alone off on Uniteits own.” She gave the example of the MADFOX vessel, which underwent more than a year of testing before it was allowed to be used in ‘degree three’ autonomy (remote controlled with people ashore).³³⁶
251. For civilian or commercial uses of MAVs, Dr Alexandros Ntovas, Reader in Maritime Law and Director of the Institute of Maritime Law at the University of Southampton, highlighted that the IMO has produced guidelines on maritime cyber risk management.³³⁷

Criminal use

252. Dr Galani told us that “criminals are much faster than states in adopting and employing technology”.³³⁸ Professor Klein and colleagues told us that there have already been several incidents where MAVs have been used for criminal purposes, such as the use of unmanned boat bombs by Houthi militants in the conflict in Yemen, or their use in the transport of illicit goods.³³⁹ This presents a maritime security threat.
253. We heard that UNCLOS provides a “starting point for establishing State rights and duties in responding to illicit activity at sea”.³⁴⁰ Professor Klein and colleagues explained that “the coastal State may exercise criminal

334 *Ibid.*

335 Written evidence from the Ministry for Defence ([UNC0018](#))

336 [Q 48](#) (Cdr Caroline Tuckett)

337 Written evidence from Dr Alexandros Ntovas ([UNC0023](#))

338 [Q 24](#) (Dr Sofia Galani)

339 Written evidence from Professor Natalie Klein, Professor Douglas Guilfoyle, Professor Saiful Karim and Professor Rob McLaughlin ([UNC0003](#))

340 *Ibid.*

jurisdiction over its territorial sea” and within the contiguous zone, “the coastal state has authority to prevent and punish infringements of its customs laws and regulations,³⁴¹ which would typically include smuggling offences.”³⁴² Other treaties, such as the UN Convention against Transnational Organised Crime (UNTOC) and the 1988 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances outline additional responsibilities and rights of states.

254. But these rely on the ability of states to establish culpability where criminal acts occur. This is challenging when criminals use MAVs because, as Professor Klein and colleagues noted, “the level of autonomy and hence the level of human involvement has implications for characterising the vessel, as well as for determining liability for conduct at sea, including ascertaining which actor is liable.”³⁴³ States will therefore need to consider carefully how to account for the ways in which MAVs could be used for criminal activities when implementing international obligations into domestic law.³⁴⁴
255. In terms of how criminal use of MAVs will be handled from a military or law enforcement perspective, Cdr Tuckett envisaged two potential challenges: of accountability and intent.³⁴⁵ On the former, she explained that “jurisdiction is a challenge” because it may not be clear who owns a MAV—“it might be registered to a flag state registry in one country but remotely operated from another”. On the latter, she explained that the current Royal Navy procedures when attempting to determine intent rely on “hailing the master and hoping that someone on the bridge will pick up the radio”. She said that there are currently not clear answers on these issues as “the technology is still developing”, but the Royal Navy is “looking at it very closely and it is something that we will have to develop as time goes on”.³⁴⁶
256. **Criminals are already making use of maritime autonomous vehicles, and in the absence of updated and specific regulation on their use, it is difficult to determine culpability for such acts. The principle of equivalency is a good starting point but there will be circumstances which warrant new regulation. As well as developing international regulations, states will need to ensure the use of maritime autonomous vehicles for criminal purposes is included in domestic legislation. We ask that the Government provide us with information in its response to this report on whether maritime autonomous vehicles have been used for criminal activities in British waters to date, and whether domestic legislation has proved adequate to tackle such breaches.**

Commercial use

257. We heard limited evidence on the use of MAVs for non-military purposes. Dr Galani told us that “shipping companies keep investing in autonomous vessels for commercial purposes”. However, they face similar issues to those used for military purposes: UNCLOS and related treaties assume an on-board crew. She gave the examples of the SOLAS and MARPOL conventions, which have “provisions that explicitly refer to the fact that on board the vessel there

341 [UNCLOS](#) Article 33(1)

342 Written evidence from Professor Natalie Klein, Professor Douglas Guilfoyle, Professor Saiful Karim and Professor Rob McLaughlin ([UNC0003](#))

343 *Ibid.*

344 [Q 28](#) (Professor Natalie Klein)

345 [Q 39](#) (Cdr Caroline Tuckett)

346 *Ibid.*

is a master and there is a qualified crew” and “provisions that refer to cabins or other areas used by the crew”.³⁴⁷

258. The limited evidence we heard on MAVs for commercial purposes indicates that considerations for its use are at an earlier stage than for military purposes.

The role of the UK

259. As a leading developer and user of maritime autonomous technologies, the UK can play an important role in the development of customary international law through its own practice, both for military and non-military purposes. This will be supported if the UK develops domestic legislation on their use.
260. The Minister told us that the Department for Transport is leading on domestic regulation of maritime autonomous vehicles, in consultation with the Ministry of Defence and FCDO.³⁴⁸ Between September and November 2021, the Department for Transport held a “Future of transport regulatory review” consultation, focussing on maritime autonomy and remote operation.³⁴⁹ The review sought “views on areas of maritime autonomy regulation that are outdated, a barrier to innovation or not designed with new technologies and business models in mind”.³⁵⁰ Cdr Tuckett said that one of the questions asked whether people operating autonomous vehicles from shore should be classified as ‘crew’ and given “seafarer rights in the way the crew of a crewed ship would have”.³⁵¹ Such a classification would have important human rights implications.³⁵²
261. We understood that the Government’s ambition is for relevant legislation to be ready in advance of the IMO’s code. Cdr Tuckett explained that the legislation would encompass civilian shipping, and that that it was her “expectation ... that Royal Navy vessels and our government vessels will be exempt ... in the way we are exempt from the Merchant Shipping Act”. However, she explained that this would not prevent the Royal Navy from “trying to follow those provisions wherever we could” and it will “provide a very helpful statement of intent from the Government as to how they wish to regulate uncrewed capabilities, which in turn will assist us in the Royal Navy.”³⁵³
262. The UK can also help develop law through engagement with the IMO’s proposed code to regulate the use of MAVs. On its website, the IMO says a core issue that needs addressing is the development of terminology and definitions, including clarification of the meaning of the term “master”, “crew” or “responsible person”, particularly for degrees three and four of autonomy.³⁵⁴
263. The Minister told us that the UK has “committed to working very closely with the IMO and with IMO member states as this develops”, but as yet he

347 Q 28 (Dr Sofia Galani)

348 Q 102 (Lord Goldsmith of Richmond Park)

349 Department for Transport, ‘Future of transport regulatory review: maritime autonomy and remote operations’ (28 September 2021): <https://www.gov.uk/government/consultations/future-of-transport-regulatory-review-maritime-autonomy-and-remote-operations> [accessed & February 2022]

350 *Ibid.*

351 Q 50 (Cdr Caroline Tuckett)

352 *Ibid.*

353 Q 44 (Cdr Caroline Tuckett)

354 International Maritime Organization, ‘Autonomous shipping’: <https://www.imo.org/en/MediaCentre/HotTopics/Pages/Autonomous-shipping.aspx> [accessed 7 February 2022]

did not feel “equipped to tell you how advanced that thinking is yet or how clear we are in the UK about our position on what those regulations ought to look like.”³⁵⁵ Andrew Murdoch told us that “In advance of 2028 ... the discussion will be guided by the guidance that has been issued [by the IMO] and by state practice along the way.”³⁵⁶

264. **The UK is a leader in the use of maritime autonomous vehicles and is in a position to set a strong international example. Domestic legislation and state practice, including through the Royal Navy, will be important for establishing customary rules about the use of MAVs. These will be important for guiding the work of the IMO on maritime autonomous vehicles. We ask that the Government updates us in its response to this report on the outcome of its ‘Future of transport regulatory review’ and provides a timeline for the development of domestic legislation.**
265. **In order to contribute effectively to the IMO’s new code for maritime autonomous vehicles, it is important that the UK Government comes to clear positions on issues including how terms such as ‘crew’ and ‘master’ can be applied to autonomous maritime vehicles. The Royal Navy’s practice provides a sensible example of how this can be done.**
266. **We urge the Government to be vigilant to cybersecurity issues relating to maritime autonomous vehicles which might cause serious operational and accountability issues.**

355 [Q 102](#) (Lord Goldsmith of Richmond Park)

356 [Q 102](#) (Andrew Murdoch)

CHAPTER 7: REGULATION OF ACCESS TO ECONOMIC RESOURCES

267. One of the priorities of UNCLOS was to establish a comprehensive regime to govern all uses of the ocean's resources, including living resources (such as fisheries) and non-living resources (such as oil and gas).³⁵⁷

Rights within the exclusive economic zone

268. States have exclusive rights to “explore, exploit, conserve and manage” natural resources in its exclusive economic zone (EEZ), the area which extends 200 nautical miles from the baseline and includes the states territorial seas and contiguous zones.³⁵⁸ Dr Caddell told us that states “also have sovereign rights over other economic benefits, such as energy production”.³⁵⁹ He said that the right to resources in the EEZ was “probably one of the most significant elements of state claims”, as while only around 36 per cent of the oceans are covered by EEZs, they contain around “90 per cent of ... harvestable resources”.³⁶⁰ States also have exclusive rights for exploring and exploiting natural resources on its continental shelf, which in some instances can extend beyond the EEZ.

Overlapping claims to sovereignty and jurisdiction

269. The situation is less straightforward where there are overlapping claims to sovereignty and jurisdiction. Dr van Logchem told us that there are around 200 maritime boundaries that still need to be delimited.³⁶¹ In these areas there may be “multiple states that claim to have jurisdiction, sovereignty or sovereign rights”.³⁶² An example of this is the dispute between China and Philippines in the South China Sea, outlined in Chapter 3.
270. Article 15 of UNCLOS explains how states should deal with overlapping claims to territorial sea:

“Neither of the two States is entitled, failing agreement between them to the contrary, to extend its territorial sea beyond the median line every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of each of the two States is measured”.

The only exception to this provision is where historic titles or “other special circumstances” apply, which allow for the delimitation the territorial seas in a different way.³⁶³

271. Articles 74(3) and 83(3) and UNCLOS make provisions for overlapping claims to the EEZ and continental shelf. Both state that: “The States concerned, in a spirit of understanding and cooperation, shall make every effort to enter into provisional arrangements of a practical nature and, during

357 [Q 30](#) (Dr Youri van Logchem)

358 [UNCLOS](#) Article 73

359 [Q 30](#) (Dr Richard Caddell)

360 *Ibid.*

361 [Q 31](#) (Dr Youri van Logchem). See also written evidence from Dr Marianthi Pappa ([UNC0005](#)).

362 [Q 31](#) (Dr Youri van Logchem)

363 [UNCLOS](#) Article 15

this transitional period, not to jeopardize or hamper the reaching of the final agreement”.³⁶⁴

272. However, Professor Churchill and Dr Hartmann described these provisions as “almost empty”, as a result of compromises that were required when UNCLOS was drafted.³⁶⁵
273. Where states cannot agree boundaries according to the above provisions, they can resort to the dispute settlement procedures outlined in Part XV of UNCLOS. Professors Guilfoyle and Klein told us that “the great majority of maritime boundary awards are complied with”.³⁶⁶ However, as the Philippines/China arbitration highlights, sometimes states do not engage with or abide by the findings of tribunals.
274. Another area of potential dispute is the Arctic, where climate change and ice-melt has increased the potential access to resources in the Arctic Ocean. Professor Schofield felt that so far states are “playing by the rules” of UNCLOS when it comes to making claims to continental shelf rights, and noted that all Arctic coastal states which are parties to UNCLOS have submitted relevant documents to the Commission on the Limits of the Continental Shelf.³⁶⁷
275. However, Professor Schofield highlighted that there have not yet been determinations on the outer limits of the continental shelf claims of Russia, Denmark (on behalf of Greenland) and Canada, which could be contentious.³⁶⁸ He added that the Commission on the Limits of the Continental Shelf “does not have the mandate to determine or settle disputes”, and so if there were overlapping claims, states would need to resort to dispute settlement”.³⁶⁹
276. **Where there are overlapping claims to territorial seas and exclusive economic zones, UNCLOS includes provisions for delimiting them, but these were the result of considerable compromise and in reality, they are vague. Nonetheless, the majority of maritime boundaries between states have been agreed. In some instances where agreement has not been reached, dispute settlement is needed, but as the 2013 arbitration brought by the Philippines against China shows, states may not cooperate with the findings of dispute settlement mechanisms. This repeats the need for states to engage in dialogue with each other and work together to resolve difficulties peacefully.**

Areas beyond national jurisdiction

277. The area beyond the limits of national jurisdiction covers about 54 per cent of the total area of the world’s oceans.³⁷⁰ In this area, the right for states to access resources varies depending on whether they are living or non-living resources, or whether they are on the deep seabed (referred to in UNCLOS as ‘the Area’) or in the water column (that is, the high seas).

364 [UNCLOS](#) Article 74 and 83

365 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#))

366 Written evidence from Professor Douglas Guilfoyle and Professor Natalie Klein ([UNC0001](#))

367 [Q 63](#) (Professor Clive Schofield)

368 *Ibid.*

369 *Ibid.*

370 Written evidence from Professor Edwin Egede ([UNC0006](#))

Non-living resources on the deep seabed

278. Access to non-living resources has always been a key motivation behind states' interest in the deep seabed. Professor Evans told us that the development of UNCLOS's provisions for the Area were "largely geared towards oil and gas and then some other types of resources in the deep seabed".³⁷¹ But there is increasing interest in other mineral resources found in the deep seabed. Professor Egede told us these "strategic mineral resources" include:

"polymetallic nodules, polymetallic sulphides, and ferromanganese cobalt-rich crusts, which contain copper, cobalt, nickel, zinc, silver, and gold, as well as lithium and rare-earth elements, that would be invaluable in meeting demand for batteries for electric cars, solar panels, wind turbines, and other clean energy technologies required for the transition to a low-carbon sustainable future".³⁷²

279. Part XI of UNCLOS designates all resources in the Area as "the common heritage of mankind" and that "Activities in the Area shall, as specifically provided for in this Part, be carried out for the benefit of mankind as a whole". This proved to be one of the most contentious parts of UNCLOS. Professor Churchill and Dr Hartmann explained:

"Prior to the adoption of UNCLOS, there was a fear that deep sea mining would become a free-for-all ... Subsequently, there was a period of time, [after UNCLOS was signed], when it looked as though many industrialised countries would not ratify UNCLOS and instead set up their own mining regime".³⁷³

280. As a result, before it came into force, the signatories to UNCLOS effectively renegotiated its provisions on the deep seabed, via an implementing agreement to Part XI of UNCLOS.³⁷⁴ Despite its name, Professor Evans told us it did not "implement" the existing provisions; it "threw out the existing Part XI of the convention on the deep seabed and more or less rewrote it".³⁷⁵ Professor Churchill and Dr Hartmann said that this agreement "encouraged industrialised countries to ratify UNCLOS", leading to the requisite number of signatories for it to enter into force.³⁷⁶

281. The implementing agreement established the International Seabed Authority (ISA), which was given powers to regulate deep sea mining in the Area.

282. The ISA told us that in its view "Part XI of UNCLOS establishes a carefully balanced and comprehensive legal regime that not only safeguards the rights and interests of all humankind, but also pays particular attention to the protection of the marine environment from harmful impacts".³⁷⁷

371 Q 15 (Professor Sir Malcolm Evans)

372 Written evidence from Professor Edwin Egede (UNC0006)

373 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann (UNC0011)

374 Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea: https://www.un.org/depts/los/convention_agreements/convention_overview_part_xi.htm [accessed 7 February 2022]

375 Q 15 (Professor Sir Malcolm Evans)

376 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann (UNC0011)

377 Written evidence from the International Seabed Authority (UNC0026)

283. The main objective of the ISA is to establish regulations permitting exploration and exploitation of natural resources based in the deep seabed. As Professor Harrison explained:

“Regulations of the ISA will be binding on all operators in areas beyond national jurisdiction, without any option to opt-out, which differentiates the ISA from most other international organisations as it exercises a quasi-legislative competence. Moreover, the ISA is in the enviable position of being able to adopt regulations for an emerging industry, before any significant activity has yet taken place. It will also have its own enforcement powers”.³⁷⁸

284. So far, the ISA has not allowed for any exploitation of resources on the seabed but has established regulations on the exploration of manganese nodules, polymetallic sulphides and cobalt-rich ferromanganese crusts. Greenpeace UK told us that ISA has granted exploration contracts for deep seabed mining to all that have applied, amounting to 30 contracts covering approximately 1.3 million square kilometres of seabed.³⁷⁹ Beyond the impending decision on deep seabed mining triggered by Nauru, some witnesses thought that the structure and powers of ISA mean it is not adequate for the protection of deep seabed resources. Greenpeace UK told us that:

“The ISA’s institutional structure and decision-making processes remain inadequate to ensure effective protection for deep sea biodiversity. Issues include lack of transparency; lack of a Scientific Committee to inform its decisions; lack of mechanisms for ensuring compliance with environmental regulations; conflict of interests as the ISA is funded by revenues from issuing mining contracts, just to mention a few”.³⁸⁰

285. Future regulations related to deep seabed mining remain the most contentious issue. Professor Churchill and Dr Hartmann told us that “a major issue” is the extent to which those regulations “will be able to mitigate the inevitable harm to the marine environment caused by deep sea mining”.³⁸¹ The Pew Charitable Trusts agreed, arguing that scientific knowledge about the deep seabed is insufficient to estimate the impact of mining. They also noted that the technology that would be needed has not been tested, and could cause unintentional damage.³⁸²

286. The process of developing these regulations may have to be significantly accelerated as a result of the steps taken by Nauru.³⁸³ On 25 June 2021

378 Written evidence from Professor James Harrison ([UNC0010](#))

379 Written evidence from Greenpeace UK ([UNC0025](#))

380 *Ibid.*

381 Written evidence from Professor Robin Churchill and Dr Jacques Hartmann ([UNC0011](#))

382 Written evidence from the Pew Charitable Trusts ([UNC0040](#))

383 Nauru’s decision is motivated by plans to start deep mining to extract cobalt, copper, nickel and manganese in the Clarion-Clipperton Zone (CCZ) in the North Pacific Ocean between Hawaii and Mexico. Nauru is a sponsoring state for Nauru Ocean Resources Inc (NORI), a wholly owned subsidiary of The Metals Co, formerly known as DeepGreen. Reuters, ‘Pacific island of Nauru sets two-year deadline for U.N. deep-sea mining rules’, (29 June 2021): <https://www.reuters.com/business/environment/pacific-island-nauru-sets-two-year-deadline-deep-sea-mining-rules-2021-06-29/> [accessed 7 February 2022]

Nauru triggered the ‘two-year rule’³⁸⁴, which obliges ISA to finalise these regulations related to commercial mining within two years.³⁸⁵

287. There is some concern that Nauru’s decision may lead to rushed decision and the dismissal of environmental concerns.³⁸⁶ However, Professor Egede told us that “surprisingly, only the ISA’s African regional group has formally expressed concern about the two-year deadline”. The ISA’s Western European and Others regional grouping, which includes the United Kingdom, has not expressed any official reservations of Nauru’s steps.³⁸⁷
288. The FCDO told us that “until there is sufficient scientific evidence about the potential impacts on deep-sea ecosystems and strong and enforceable environmental regulations in place, the Government has committed not to sponsor or support the issuing of any exploitation licences for deep-sea mining projects”.³⁸⁸ They added that the Government will “continue to press for the very highest environmental standards to be agreed and implemented by the International Seabed Authority”.³⁸⁹ Professor Harrison told us it will be important for the Government to set out by what criterion it will assess ISA regulations to be “strong”.³⁹⁰
289. **We would like to hear more about the FCDO’s evidence review of the potential risks and benefits of deep seabed mining, and would like further detail on what the Government is doing to assure that ISA’s regulation on deep seabed mining is evidenced and supported by science. We would also like to hear what assessment the Government has made of the potential future risk of disputes over deep-sea resources.**
290. **Deep-sea mining should only be authorised when the minerals in question cannot be recovered in sufficient quantity from existing products, as in a circular economy model, and when the deep-sea mining of those minerals is less environmentally damaging than extraction on land. We therefore welcome the Government’s cautious position and ask that it continues to encourage other states to do the same in order to ensure protection of the marine environment.**

384 “This request was made under paragraph 15 of section 1 of the Annex to the Agreement relating to the implementation of Part XI of United Nations Convention on the Law of the Sea. Paragraph 15 stipulates that if a State party, which is ready to submit a plan of work for approval, requests the ISA to complete the elaboration of all relevant regulations for exploitation, the ISA must do so within two years of the request. If the regulations have not been elaborated within two years, the ISA shall provisionally approve the plan of work on the basis of whatever (draft) regulations in place at the time. It is the first time that this provision is triggered by a State party.” Reuters, ‘Pacific island of Nauru sets two-year deadline for U.N. deep-sea mining rules’ (29 June 2021): <https://www.reuters.com/business/environment/pacific-island-nauru-sets-two-year-deadline-deep-sea-mining-rules-2021-06-29/> [accessed 7 February 2022]

385 Written evidence from Professor Edwin Egede (UNC0006). Before this deadline was set, there was no clear guidance from the ISA when it would finalise drafting guidelines for deep seabed mining. Norway has signalled it would allow deep seabed mining on its continental shelf as early as 2023; the EU was signalling a joint position at negotiations on ISA environmental exploration regulations. Seas at Risk, *At a crossroads: Europe’s role in deep-sea mining* (2021): https://seas-at-risk.org/wp-content/uploads/2021/05/PDF_COMPRESSED_SEA_AT_RISK_2.pdf [accessed 7 February 2022]

386 Written evidence from Greenpeace UK (UNC0025), the Pew Charitable Trusts (UNC0040) and the Ocean Law Specialist Group (UNC0042)

387 Written evidence from Professor Edwin Egede (UNC0006)

388 Written evidence from the FCDO (UNC0028)

389 *Ibid.*

390 Written evidence from Professor James Harrison (UNC0010)

Living resources on the deep seabed

291. Living resources on the deep seabed are not regulated by the ISA. Until recently there was very limited understanding of the value of living resources on the deep seabed. The BBNJ agreement, discussed in detail in Chapter 4, may result in greater regulation of living resources both on the deep seabed and in the water column.

Fisheries

292. Fisheries are currently the most economically significant living resource in the oceans. Professor Harrison told us that as such, they are a “prominent issue in maritime affairs” and “at the root of numerous disputes at the international level”.³⁹¹
293. In addition to states’ rights to exploit resources in their EEZs, Article 116 of UNCLOS gives states the right to engage in fishing on the high seas. However, in both the EEZ and high seas, UNCLOS also places a duty on states to “cooperate with other states” in taking measures “as may be necessary for the conservation of the living resources of the high seas” and requires states to establish regional or sub-regional fisheries management organisations (RMFOs) to manage fisheries which straddle different EEZs or EEZs and the high seas.³⁹²
294. These provisions were expanded upon in a second implementing agreement to UNCLOS—the UN Fish Stocks Agreement (UNFSA).³⁹³ The objective of UNFSA was to ensure the long-term conservation and sustainable use of straddling fish stocks and highly migratory fish stocks, both in EEZs and on the high seas.

Challenges facing fisheries management

295. Dr Caddell noted that in reality, many fish stocks are shared between different EEZs. As such, states are required to cooperate on the management and conservation of fish stocks through RFMOs, which “exercise scientific and managerial oversight of these stocks through the will of the coastal states”.³⁹⁴
296. Dr Caddell told us that despite an “alphabet soup” of RFMOs across the globe, many fish stocks remain underregulated:

“If you look at a map of regulatory areas, you will see again this tapestry of regional fisheries management organisations. There are also a large number of gaps within this. Some are due to geopolitical conflict, such as the south-west Atlantic, but a number of fish stocks are deceptively underregulated”.

He added that many RFMOs are “single-species RFMOs”, meaning that various types of fish are not regulated within those areas.³⁹⁵

391 Written evidence from Professor James Harrison ([UNC0010](#))

392 [UNCLOS](#) Articles 116, 118 and 119

393 United Nations General Assembly, ‘The Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks’ (24 July–4 August 1995): https://www.un.org/depts/los/convention_agreements/texts/fish_stocks_agreement/CONF164_37.htm [accessed 7 February 2022]

394 [Q 30](#) (Dr Richard Caddell)

395 *Ibid.*

297. The Minister told us that one such gap in RFMO coverage is around the Falkland Islands.³⁹⁶ He told us that “the establishment of [a] new RFMO to fill that gap” could be a “perfect opportunity to create something with Argentina where our mutual concerns can be addressed in a way that means everyone wins”.³⁹⁷
298. Professor Harrison told us that the effectiveness of the RFMO regime depends upon the quality of regional regulation and enforcement measures.³⁹⁸ He explained that RFMOs have “a large degree of discretion to determine the precise contents of such measures and negotiations are often highly political” and added that “even once agreement has been reached, members are often permitted to opt out of management measures. But recent developments in international fisheries law increasingly require states to give reasons for such opt-outs, allowing for independent scrutiny and even the introduction of sanctions for states which “repeatedly fail to comply”.³⁹⁹
299. However, Professor Harrison noted that “progress on strengthening international fisheries governance is not universal” and that “overfishing remains a problem in some parts of the world”.⁴⁰⁰ He said there were “several examples in the North-East Atlantic of failed management”, stemming from a lack of agreement on issues such as distribution of total allowable catches. This has led to a situation where countries establish unilateral fishing quotas, “leading to total catches exceeding the scientific advice”.⁴⁰¹ Professor Barnes agreed, telling us that around “33 per cent of stocks are currently overfished and only 7 per cent of stocks are fished at the maximum sustainable yield”, suggesting that “existing legal framework is not working effectively”.⁴⁰²
300. Professor Harrison called on the UK, a member of the RFMO covering the North-East Atlantic, to influence the debate on sustainable fisheries in the North-East Atlantic and in other regions of the world.⁴⁰³ As an example, he told us that the UK “has signed but not yet ratified the 2019 Protocol to the International Convention for the Conservation of Atlantic Tunas, which would go some way to strengthening the institutional framework of the International Commission on the Conservation of Atlantic Tunas”.⁴⁰⁴
301. **UNCLOS and the UN Fish Stocks Agreement require states to cooperate to ensure the effective management and conservation of fish stocks that are migratory or straddle exclusive economic zones and the high seas. Many Regional Fisheries Management Organisations have been formed, but they do not cover all fish stocks. There are also examples of failed management, including in regional fisheries management organisations the UK is party to.**
302. **We urge the Government to mark the 40th anniversary of the Falklands War with a serious effort to establish a regional fisheries management organisation that would address the current fishing challenges in the waters between the Falkland Islands and Argentina.**

396 [Q 105](#) (Lord Goldsmith of Richmond Park)

397 [Q 112](#) (Lord Goldsmith of Richmond Park)

398 Written evidence from Professor James Harrison ([UNC0010](#))

399 *Ibid.*

400 *Ibid.*

401 *Ibid.*

402 [Q 87](#) (Professor Richard Barnes)

403 Written evidence from Professor James Harrison ([UNC0010](#))

404 *Ibid.*

303. **We ask the Government to confirm why it is yet to ratify the 2019 Protocol to the International Convention for the Conservation of Atlantic Tunas.**

Illegal, unreported and unregulated fishing

304. Witnesses told us that the biggest challenge facing effective fisheries management was illegal, unreported and unregulated (IUU) fishing. IUU fishing is a broad term that can refer to: fishing in territorial waters of a state without its permission, fishing in violation of national laws or international obligations, not reporting catches to relevant national authorities; and fishing in contravention of rules established by RFMOs.⁴⁰⁵
305. Professor Barnes identified two main drivers of IUU fishing. First, there are “economic drivers”—there are “more vessels able to catch fish than there are fish to be caught”, and “as long as we have excess fishing capacity, there will always be pressure to engage in fishing activities.”⁴⁰⁶ Second, there are demand drivers, as there will “always be incentives to try to catch fish to either sell or pass on”.⁴⁰⁷
306. Professor Barnes told us that the economic cost of IUU fishing is estimated to be between \$10 billion and \$23 billion per year: “about 20 per cent of global commercial fish catch”.⁴⁰⁸ Dr Caddell told us that according to the most widely cited study, “up to 31 per cent of catches in particular fisheries could be IUU in nature”, and across the oceans as a whole it could be around “one in five wild caught fish”.⁴⁰⁹
307. RFMOs have an important role to play in addressing IUU fishing. However, Professor Barnes told us that there are two challenges facing the use of RFMOs to address IUU fishing. First, he explained that some RFMOs “simply lack the competence to regulate fisheries”, which “contributes to the unregulated aspects of fishing activity”.⁴¹⁰
308. Second, even where RFMOs develop regulations, they may not necessarily be effective as they are non-binding on third states. Professor Barnes explained that “although RFMOs have the power to adopt regulations and they can encourage non-contracting states to participate in those, strictly speaking ... treaty obligations do not bind third states without their consent”. As a result: “You will always have a potential free-rider problem”.⁴¹¹
309. Third, there are limited mechanisms to hold states to account for failing to deal with IUU fishing. Professor Barnes explained that:

“States may sign up to [UNCLOS], the Fish Stocks Agreement or the Port State Measures Agreement, which require them to inspect vessels coming into port for IUU fishing activities, but if they fail to implement them, the shortcomings are not exposed and there are no mechanisms

405 Food and Agriculture Organization of the United Nations, ‘Illegal, Unreported and Unregulated (IUU) fishing’: <https://www.fao.org/iuu-fishing/background/what-is-iuu-fishing/en/> [accessed 7 February 2022]

406 Q 87 (Professor Richard Barnes)

407 *Ibid.*

408 *Ibid.*

409 Q 33 (Dr Richard Caddell)

410 Q 93 (Professor Richard Barnes)

411 *Ibid.*

to address that in the same way there are under the mandatory audit system”.⁴¹²

310. Professor Barnes said that “tackling IUU fishing is not just a legal issue” and argued that it should be approached in a “more holistic manner”. In addition to regulation, it would require “improvements of implementation and compliance”, “capacity building”, and “working with ... markets and purchasers of seafood products to introduce changes that can drive changes up the supply chain”.⁴¹³

311. The FCDO identified IUU fishing as:

“One of the most serious threats to the sustainable exploitation of living aquatic resources. It depletes fish stocks, distorts competition and destroys marine habitats. It jeopardizes the very foundation of international efforts to promote better ocean governance and undermines efforts to manage fisheries properly”.⁴¹⁴

It told us that the UK is playing an “active role” in organisations such as the UN Food and Agriculture Organization, Commission for the Conservation of Antarctic Marine Living Resources, and International Maritime Organization to promote sustainable fishing, and is “specifically pushing for strengthened measures in preventing and deterring IUU fishing”.⁴¹⁵

312. **The Government should be a leader in strengthening the management and enforcement powers of regional fisheries management organisations. This would apply for both signatory states and those non-signatory states that fish in the area of the RFMO or fish the species covered by an RFMO.**

313. **Illegal, unregulated and unreported fishing is one of the biggest threats to the effective management of fish stocks and a major cause of overfishing. We ask the Government to provide us with more detail on the actions it is taking to address IUU fishing, particularly in Regional Fisheries Management Organisations of which the UK is a member.**

Impact of climate change on fish stocks

314. An increasing challenge to the effective management of fisheries is the impact of warming oceans. The International Council for the Exploration of the Sea reported in 2017 that there have been changes in the distribution of 16 North-East Atlantic species, and that eight of these have shifted across management boundaries.⁴¹⁶

315. Professor Harrison warned that climate change could have significant impacts on the existing systems of catch management, “as states may start to demand changes to management rules to reflect the new status quo, potentially leading to resource conflict”.⁴¹⁷ On the other hand, “the precise extent and permanency of any changes might be disputed by other states who could lose out from an amendment to existing arrangements”. He advocated

412 [Q 93](#) (Professor Richard Barnes)

413 [Q 87](#) (Professor Richard Barnes)

414 Written evidence from the FCDO ([UNC0028](#))

415 *Ibid.*

416 Written evidence from Professor James Harrison ([UNC0010](#))

417 *Ibid.*

for “credible and transparent scientific information to form the basis for decision-making” as well as more robust decision-making processes and associated accountability mechanisms”.⁴¹⁸ The impacts of climate change on fish stock are also discussed in Chapter 4.

Subsea cables

316. International communication subsea cables are responsible for around 95–97 per cent of global communications, and as such are a significant economic asset.⁴¹⁹ The UK itself relies on 62 fibre optic cables and further 97 interconnectors and power cables. Global Marine Group estimates that around 25 per cent of electricity arrives to the UK via these cables, and that figure “is rapidly expanding”. Subsea cables also connect the UK energy grid to energy coming from oil, gas and renewables.⁴²⁰
317. UNCLOS provides several provisions for the laying of subsea cables. Articles 58, 79 and 112 give all states the rights to lay submarine cables in exclusive economic zones and continental shelves and the high seas respectively.⁴²¹ States also have the right to “establish conditions for cables ... entering its territory or territorial sea” and when laying cables, must have “due regard to cables or pipelines already in position”.⁴²²
318. UNCLOS also includes provisions for the maintenance and repair of cables. Articles 113–115 requires states parties to introduce domestic legislation setting out how any damage (whether by ships or by individuals) will be penalised. The culpable party (a ship flagged to a state or a state’s national) is financially accountable for the damage.⁴²³
319. Other important international agreements further regulating submarine cables include the 1884 International Convention for the Protection of Submarine Telegraph Cables; and the 1972 International Regulations for Preventing Collisions at Sea.⁴²⁴

Challenges in practice

320. Accidental anchoring, fishing and natural disasters are the most common causes of damages of undersea cables.⁴²⁵ They may be also targeted as parts of wider military operations (as was the case in Crimea), or potentially be subject to terrorist attacks.⁴²⁶
321. Although UNCLOS requires states to develop domestic legislation related to deep sea cables, we heard that many states still have not done so. The FCDO told us that there were instances when a cable beneath the high sea or EEZ was damaged, either intentionally or due to recklessness, and “no crime has [technically] been committed”.⁴²⁷ Professor Klein agreed, saying

418 *Ibid.*

419 Written evidence from National Oceanography Centre ([UNC0022](#)) and Global Marine Group ([UNC0032](#))

420 Written evidence from Global Marine Group ([UNC0032](#))

421 [UNCLOS](#) Articles 58, 79 and 112

422 [UNCLOS](#) Articles 79

423 [UNCLOS](#) Articles 113, 114 and 115

424 Written evidence from European Subsea Cables Association ([UNC0031](#))

425 Written evidence from the FCDO ([UNC0028](#)) and [Q 32](#) (Dr Youri van Logchem)

426 Written evidence from Global Marine Group ([UNC0032](#))

427 Written evidence from the FCDO ([UNC0028](#))

that there are no “comprehensive rules protecting submarine cables”, despite the fact they are “critically important for the global economy”.⁴²⁸

322. Additional legal and practical challenges stem from the fact that undersea cables are usually owned and operated by global multi-owner businesses rather than states. SafeSeas told us that laws regulating operations of such companies are unclear: “In contrast to ships that have a clearly assigned nationality, cables are not under full sovereignty or flag”.⁴²⁹
323. Cables crossing disputed maritime areas face additional challenges. Although UNCLOS does not provide clarity about cables located in disputed maritime areas, according to Dr van Logchem companies (which are usually based in a third state not involved in the dispute) can freely maintain, lay or repair undersea cables.⁴³⁰ But in practice states sometimes “use submarine cables as a vehicle to strengthen their claim to the disputed area in question”.⁴³¹ For example, they might adopt legislation “that would require a permit to be obtained if a submarine cable company wants to place a new submarine cable system within the disputed EEZ area”.⁴³² As a consequence, companies tend to avoid disputed territories, even if that requires hundreds of kilometres of additional cables and increased costs.⁴³³
324. Lastly, witnesses added that there is also a “lack of information sharing on cable breaks” which “poses a threat to the functioning and security of the global subsea cable system and global connectivity”.⁴³⁴

Priorities for the United Kingdom

325. The FCDO told us that the Government maintains engagement with the subsea cable industry over the protection and maintenance of cables and encourages the installation of additional cables to “ensure resilience and route diversity”. It added the Government is “alert to State threats to cables” and is working with allies to mitigate them.⁴³⁵
326. Global Marine Group told us that stronger domestic regulation is needed, with a “permit system overseen by Ofcom and Ofgem”.⁴³⁶ This would require a “mandatory UK sovereign repair coverage” and a “regular inspection regime”.⁴³⁷ They suggested that it should also be mandated that maintenance is undertaken by UK flagged vessels, which would “give the Government more control in the case of a national emergency, ensuring that prioritisation could be given to domestic cables, connectivity, security and power”.⁴³⁸ Dr Galani suggested that the UK could come up with suggestions for “a strategy or co-operation agreement” addressing the need to secure undersea cables.⁴³⁹

428 [Q 25](#) (Professor Natalie Klein)

429 Written evidence from SafeSeas ([UNC0014](#))

430 [Q 32](#) (Dr Youri van Logchem)

431 *Ibid.*

432 *Ibid.*

433 *Ibid.*

434 Written evidence from SafeSeas ([UNC0014](#)). See also written evidence from the European Subsea Cables Association ([UNC0031](#)).

435 Written evidence from the FCDO ([UNC0028](#))

436 Written evidence from Global Marine Group ([UNC0032](#))

437 *Ibid.*

438 *Ibid.*

439 [Q 29](#) (Dr Sofia Galani)

327. In terms of international regulation, SafeSeas called for closer cooperation between the Government and the International Cable Protection Committee, for example on a future global strategy “for developing new law and improving global awareness and everyday information sharing on the issue”.⁴⁴⁰
328. **Subsea cables are a critical element of the UK’s communications infrastructure. While UNCLOS places obligations on states to allow for the laying and repair of such cables, these are not always followed in practice. It is crucial that the laws are clear where responsibilities lie for the maintenance and protection of subsea cables. The international regulatory regime is unclear, and this must change, considering their significance. The Government should work with partners and others to address this. The UK should work to improve domestic legislation for cables in the UK’s territorial waters, as well as working with partners to strengthen the international regulatory regime.**

440 Written evidence from SafeSeas ([UNC0014](#)). See also written evidence from the European Subsea Cables Association ([UNC0031](#)).

SUMMARY OF CONCLUSIONS AND RECOMMENDATIONS

Evaluating UNCLOS

1. Enforcement is a weakness of international law, and is a particular challenge on the high seas. While UNCLOS attempts to address this via the use of flag states, issues related to enforcement capacity and the widespread use of flags of convenience has led to a jurisdictional vacuum on the high seas. (Paragraph 41)
2. The signing of UNCLOS in 1982 was a fundamental step forward for the governance of the oceans. It has been largely successful, and despite the shortcomings explored later in this report, any renegotiation would be dangerous. However, it is clear that in light of its gaps and modern challenges, including human rights at sea, rising sea levels, new technologies and the quest for ever more resource, its provisions need updating and supplementing. It will be important to do this in a way which does not undermine the convention. (Paragraph 53)
3. The Government should use its influence and voice within the International Maritime Organization to explore ways it can update and amend the existing law to address concerns, including maritime autonomous vehicles and human rights at sea. (Paragraph 54)
4. The UK should reconsider its position that annual meetings of the States Parties to UNCLOS are not an appropriate forum to discuss substantive issues. There is scope for these meetings to be used to come to agreement amongst states on the interpretation of UNCLOS's provisions in the light of emerging challenges. To make the most of this, the UK must ensure it invests in preparatory diplomacy and engagement with likeminded states. (Paragraph 55)
5. The UK, with its strong maritime interests and history, should take on a global leadership role in developing and enforcing the law of sea. The Government should increase its engagement with states and other actors especially in developing areas of the law of the sea, such as human rights at sea, climate change and new maritime technologies. The Government should assist initiatives that further this aim, especially those with connections to the UK. (Paragraph 59)
6. The Government should aim to increase the presence of British judges on institutions like ITLOS, and British personnel in roles in related international institutions. This will show that the UK is committed to upholding the provisions of UNCLOS and the international rule of law. (Paragraph 60)

Maritime security

7. While exclusive flag state jurisdiction is an important principle of the law of the sea, the widespread use of flags of convenience poses a particular challenge for maritime security and the enforcement of laws on the high seas. (Paragraph 77)
8. The use of flags of convenience is a major barrier to the enforcement of rules on the high seas. Often flag states with the largest registered tonnage do not have the capacity or inclination to fulfil their obligations in terms of management, control or enforcement of their registered fleet. The Government should take a leadership role and work with others to ensure

the link between vessels and the state in which they are registered is genuine and substantial. (Paragraph 78)

9. The Government should commit to tightening the criteria of its own ship registry, to act as an example to other states. (Paragraph 79)
10. It remains unclear why the UK Government has not signed the 1986 Convention on Conditions for Registration of Ships, and we regret that this has not happened. We ask that the Government includes in its response to this report more detail on the review they have commissioned into this, including its remit and when it will report. (Paragraph 80)
11. We welcome the increased appetite for strengthening port state controls, and the International Maritime Organization should be commended for its efforts in this regard. (Paragraph 81)
12. UNCLOS and related instruments have generally been successful at tackling piracy, but there remain challenges. Acts of piracy often originate from the land and cannot be solved by agreements focused only on the sea. However, supplementary agreements including the Convention for the Suppression of Unlawful Acts against the Safety of Maritime Navigation have enhanced the provisions of UNCLOS, and operations combating piracy along the coast of Somalia provide an example of how piracy can be successfully addressed in practice. The Government should further enhance its capacity building activities to assist other coastal states to maintain the good order of the oceans and suppress maritime security threats, including piracy and armed robbery at sea. (Paragraph 91)
13. The advent of maritime autonomous vehicles provides a direct challenge to UNCLOS, which assumes vessels are crewed and cannot be operated remotely. The Government should monitor such developments carefully, and advocate for a clarification of the existing rules if there is an increase in the use of autonomous vehicles for piratical acts. (Paragraph 92)
14. The UK should become an advocate and champion of developing and island states with regard to the protection of their coastal waters, exclusive economic zones, and the resources that they hold. (Paragraph 96)
15. We ask that in its response to this report the Government sets out more detail about the kind of support (both in terms of capacity building and resources) the UK provides to developing countries to improve the effectiveness of law enforcement within their waters. (Paragraph 97)
16. The Government should consider noncompliance with UNCLOS as a fundamental violation of the international rules-based order. Such violations should give cause for the Government to consider its relationship with noncompliant states. (Paragraph 107)
17. China's actions in the South China Sea directly undermine and are at odds with the principle of freedom of navigation provided for in UNCLOS. (Paragraph 108)
18. Evidence suggests that it is highly unlikely that China will decide to change its policy of claiming exclusive jurisdiction over the majority of the South China Sea and will continue to reject the principles of freedom of navigation and freedom of innocent passage as outlined by UNCLOS. (Paragraph 109)

19. China's stance poses a challenge to international law. The UK Government should continue to work with its partners and allies to protect and preserve the principles of freedom of navigation not only in South China Sea, but in every region where it is challenged. (Paragraph 110)
20. Climate change is likely to lead to additional maritime security challenges, particularly in the Arctic. We ask that in its response to this report the Government provides us with information about how it is monitoring security-related developments in the Arctic. (Paragraph 113)

Climate change and the environment

21. Sea levels will continue to rise over the coming century as a result of climate change. This will have significant impacts on the traditional mechanisms of establishing maritime entitlements for coastal and island states. In particular, it will impact low-lying and small island states, which face an existential threat. The UK and its Overseas Territories will also be affected by this issue. (Paragraph 125)
22. The Government should take a formal position that baselines should remain fixed in their current position. This would ensure that no states, including the UK and its Overseas Territories, lose their current maritime entitlements. The Government should work with partners to advance agreement amongst States Parties to UNCLOS and create supplementary legal mechanisms that secure maritime baselines and entitlements. (Paragraph 126)
23. We are encouraged that the Government recognises that climate change will become a significant driving factor for migration, but ask that it provides further detail in its response to this report on the ways in which the UK is preparing to support these people in light of the real risk some may lose their territories and statehood. This is an immediate and growing problem which needs global leadership and political will. We ask that the response includes details of those territories most likely to be at risk and the number of people likely to be adversely affected. (Paragraph 129)
24. UNCLOS places states under an obligation to "prevent, reduce and control pollution of the marine environment" from all sources, including greenhouse gas emissions. This obligation is increasingly important because of the inter-related nature of climate change and environmental degradation, including via ocean acidification and the displacement of marine species. Despite success in managing marine sources of pollution, there has been less attention paid to the impacts of greenhouse gas emissions and climate change on the oceans. In part, this results from a lack of coordination between the UNCLOS and UNFCCC processes. The Government should continue to push for recognition of the oceans within the UNFCCC, and for greater coordination between the UNFCCC and UNCLOS processes. (Paragraph 143)
25. The obligations in UNCLOS and related instruments to protect the marine environment relating to land-based sources of pollution are weaker than those relating to marine-based pollution, which is successfully managed by the MARPOL treaty. Strengthening the duties relating to land-based sources of pollution will require greater cooperation between the UNFCCC and UNCLOS processes. The UK Government should aim to be a leader in this regard. (Paragraph 144)

26. The UK should continue its efforts to be an international leader in net zero shipping, and work through the IMO to get multilateral agreement on more ambitious measures. (Paragraph 145)
27. Climate change is already altering the distribution of fish stocks in the global ocean and will continue to do so. This creates the potential for disputes, as fish stocks move away from traditional fishing grounds. (Paragraph 152)
28. Cooperation with partners, especially neighbouring states, will be crucial to manage the implications of changing distributions of fish stocks. (Paragraph 153)
29. The Arctic is a fragile and valuable marine environment that is facing significant climate change impacts. It is vital that the increased economic opportunities are not prioritised over protecting the marine environment. (Paragraph 159)
30. We welcome the recent 16-year international agreement banning commercial fishing in the Central Arctic Ocean. The UK, in its role as an observer at the Arctic Council, should continue to advocate for the prevention of unregulated fishing in the Arctic Ocean, and for the establishment of marine protected areas. (Paragraph 160)
31. The Government should continue to support the ongoing negotiations for the BBNJ Agreement and work to ensure that the obligations of states are not diluted. This will be vital for ensuring the 30by30 target can be met. The Government will need to engage with states which are reticent to expand the marine protected area network. (Paragraph 171)
32. We commend the Government for the Blue Belt Programme, but it should provide further support for those Overseas Territories more reliant on marine resources for their economies, not least in the areas of control and enforcement. (Paragraph 172)

Human rights and labour protections at sea

33. UNCLOS has little to say about human rights. Nonetheless, it is clear that international human rights law applies to people at sea. But there are barriers to the application of human rights at sea in practice. The Government acknowledged the existence of these barriers, but did not say how it intended to address them. (Paragraph 190)
34. We ask that in its response to this report, the Government confirms that it considers international human rights law to apply equally at sea as it does on land, and to commit to taking a clear and unequivocal position on this both domestically and internationally. (Paragraph 191)
35. We urge the Government to acknowledge that human rights at sea include a wide range of rights, and not just those pertaining to labour conditions, important though these are. In its response to us, we ask that the Government sets out what it considers its obligations to be concerning human rights at sea, including with reference to human trafficking and modern slavery. (Paragraph 192)
36. The principle of exclusive flag state jurisdiction and the issue of flags of convenience poses a challenge to the effective monitoring and enforcement of

human rights at sea. We reiterate our request for the Government to provide more detail on its review of this issue. (Paragraph 193)

37. Migration at sea is increasingly undertaken by vulnerable groups, including refugees and asylum seekers, in unseaworthy vessels which frequently need emergency assistance. Under UNCLOS states have a duty to render assistance to persons in distress at sea, but this obligation is increasingly side-lined by security and immigration policies. (Paragraph 204)
38. Despite the Minister's assurances, we are not convinced that provisions relating to maritime migration and 'turnaround tactics' in the Nationality and Borders Bill are compliant with the UK's duties under UNCLOS, in particular Article 98. We therefore ask that in its response to this report, the Government provides us with a full assessment of the compatibility of the provisions in the Nationality and Borders Bill dealing with so-called forced turnarounds with the UK's international responsibilities under Article 98 of UNCLOS. (Paragraph 205)
39. Forced labour and excessive working conditions are increasing concerns for those working at sea in the fishing and shipping industries. While there are international agreements for the protection of labourers' human rights, the flag state system again stymies their enforcement and realisation in practice. (Paragraph 214)
40. Victims of human rights abuses at sea, including victims of physical and sexual crimes, do not have sufficient access to timely or effective justice. Their situation is exacerbated by complex questions concerning legal jurisdiction and the flag state's responsibility to investigate and prosecute human rights abuses committed at sea. The obligations of third states to exercise jurisdiction over these abuses and crimes are also not clear: states appear to use the principle of exclusive flag state jurisdiction to avoid intervening on behalf of victims, even if the abuse takes place within their maritime jurisdiction. As a result, victims of human rights abuses at sea are denied access to an effective remedy. (Paragraph 219)
41. The increased use of privately contracted armed security personnel has been effective at deterring piracy, but there have been examples of these contractors harming and killing fishers and alleged pirates. Privately contracted armed security personnel are poorly regulated, and individuals are rarely held accountable for such crimes. (Paragraph 220)
42. There are a range of mechanisms the Government should investigate for addressing human rights abuses at sea, including port state controls, sanctions, and private arbitration systems. The Government must also ensure that its own domestic legislation fully reflects its obligations under international human rights law, in particular, the Nationality and Borders Bill. (Paragraph 231)
43. Piecemeal solutions will not be sufficient. We call on the Government to work with likeminded partners to advance a unified approach to human rights at sea. This will need to draw together practical solutions to challenges including mass migration, forced labour, physical and sexual crimes, and crimes committed by privately contracted armed security personnel, and must lead to the creation of new mechanisms to address the issue. (Paragraph 32)

Maritime autonomous vehicles

44. The Royal Navy is currently adopting a “principle of equivalence” approach to determine how maritime autonomous vehicles can fit into the existing legal regime. In the absence of international agreement, and as one of the leaders in the development of this technology, this seems a sensible approach and the Royal Navy should be commended for its careful consideration of these issues. The Government should monitor other state’s responses to the Royal Navy’s treatment of its maritime autonomous vehicles, and work with partner states to ensure the changes under discussion at the IMO reflect the sensible approach adopted by the Royal Navy. (Paragraph 244)
45. Whether maritime autonomous vehicles can be classified as warships or not will have significant implications for their use, including their protection from seizure by other states. In the absence of international regulation, the Royal Navy’s practice has been to register vessels in such a way to emphasise they are state owned and operated, providing them with sovereign immunity while ensuring the state can be held accountable for their actions. As other states begin to develop and use maritime autonomous vehicles, it will be important for the UK to work with like-minded partners to regulate these technologies with reference to these principles. Once again, the Royal Navy’s practical approach to ensuring equivalency with the provisions of UNCLOS is sensible and to be commended. (Paragraph 249)
46. Criminals are already making use of maritime autonomous vehicles, and in the absence of updated and specific regulation on their use, it is difficult to determine culpability for such acts. The principle of equivalency is a good starting point but there will be circumstances which warrant new regulation. As well as developing international regulations, states will need to ensure the use of maritime autonomous vehicles for criminal purposes is included in domestic legislation. We ask that the Government provide us with information in its response to this report on whether maritime autonomous vehicles have been used for criminal activities in British waters to date, and whether domestic legislation has proved adequate to tackle such breaches. (Paragraph 256)
47. The UK is a leader in the use of maritime autonomous vehicles and is in a position to set a strong international example. Domestic legislation and state practice, including through the Royal Navy, will be important for establishing customary rules about the use of MAVs. These will be important for guiding the work of the IMO on maritime autonomous vehicles. We ask that the Government updates us in its response to this report on the outcome of its ‘Future of transport regulatory review’ and provides a timeline for the development of domestic legislation. (Paragraph 264)
48. In order to contribute effectively to the IMO’s new code for maritime autonomous vehicles, it is important that the UK Government comes to clear positions on issues including how terms such as ‘crew’ and ‘master’ can be applied to autonomous maritime vehicles. The Royal Navy’s practice provides a sensible example of how this can be done. (Paragraph 265)
49. We urge the Government to be vigilant to cybersecurity issues relating to maritime autonomous vehicles which might cause serious operational and accountability issues. (Paragraph 266)

Regulation of access to economic resources

50. Where there are overlapping claims to territorial seas and exclusive economic zones, UNCLOS includes provisions for delimiting them, but these were the result of considerable compromise and in reality, they are vague. Nonetheless, the majority of maritime boundaries between states have been agreed. In some instances where agreement has not been reached, dispute settlement is needed, but as the 2013 arbitration brought by the Philippines against China shows, states may not cooperate with the findings of dispute settlement mechanisms. This repeats the need for states to engage in dialogue with each other and work together to resolve difficulties peacefully. (Paragraph 276)
51. We would like to hear more about the FCDO's evidence review of the potential risks and benefits of deep seabed mining, and would like further detail on what the Government is doing to assure that ISA's regulation on deep seabed mining is evidenced and supported by science. We would also like to hear what assessment the Government has made of the potential future risk of disputes over deep-sea resources. (Paragraph 289)
52. Deep-sea mining should only be authorised when the minerals in question cannot be recovered in sufficient quantity from existing products, as in a circular economy model, and when the deep-sea mining of those minerals is less environmentally damaging than extraction on land. We therefore welcome the Government's cautious position and ask that it continues to encourage other states to do the same in order to ensure protection of the marine environment. (Paragraph 290)
53. UNCLOS and the UN Fish Stocks Agreement require states to cooperate to ensure the effective management and conservation of fish stocks that are migratory or straddle exclusive economic zones and the high seas. Many Regional Fisheries Management Organisations have been formed, but they do not cover all fish stocks. There are also examples of failed management, including in regional fisheries management organisations the UK is party to. (Paragraph 301)
54. We urge the Government to mark the 40th anniversary of the Falklands War with a serious effort to establish a regional fisheries management organisation that would address the current fishing challenges in the waters between the Falkland Islands and Argentina. (Paragraph 302)
55. We ask the Government to confirm why it is yet to ratify the 2019 Protocol to the International Convention for the Conservation of Atlantic Tunas. (Paragraph 303)
56. The Government should be a leader in strengthening the management and enforcement powers of regional fisheries management organisations. This would apply for both signatory states and those non-signatory states that fish in the area of the RFMO or fish the species covered by an RFMO. (Paragraph 312)
57. Illegal, unregulated and unreported fishing is one of the biggest threats to the effective management of fish stocks and a major cause of overfishing. We ask the Government to provide us with more detail on the actions it is taking to address IUU fishing, particularly in Regional Fisheries Management Organisations of which the UK is a member. (Paragraph 313)

58. Subsea cables are a critical element of the UK's communications infrastructure. While UNCLOS places obligations on states to allow for the laying and repair of such cables, these are not always followed in practice. It is crucial that the laws are clear where responsibilities lie for the maintenance and protection of subsea cables. The international regulatory regime is unclear, and this must change, considering their significance. The Government should work with partners and others to address this. The UK should work to improve domestic legislation for cables in the UK's territorial waters, as well as working with partners to strengthen the international regulatory regime. (Paragraph 328)

APPENDIX 1: LIST OF MEMBERS AND DECLARATIONS OF INTEREST

Members

Lord Alton of Liverpool
 Lord Anderson of Swansea
 Baroness Anelay of St Johns (Chair)
 Baroness Blackstone
 Lord Boateng
 Lord Campbell of Pittenweem
 Baroness Fall
 Baroness Rawlings
 Lord Stirrup
 Baroness Sugg
 Lord Teverson
 Lord Wood of Anfield

Declaration of interests

Lord Alton of Liverpool
No relevant interests declared

Lord Anderson of Swansea
No relevant interests declared

Baroness Anelay of St Johns (Chair)
Chair designate of UNA-UK [unpaid]. In office from June 2022

Baroness Blackstone
No relevant interests declared

Lord Boateng
No relevant interests declared

Lord Campbell of Pittenweem
No relevant interests declared

Baroness Fall
No relevant interests declared

Baroness Rawlings
No relevant interests declared

Lord Stirrup
No relevant interests declared

Baroness Sugg
No relevant interests declared

Lord Teverson
Patron, Human Rights at Sea

Lord Wood of Anfield
Chair, United Nations Association UK

A full list of members' interests can be found in the register of Lord's interests: <https://members.parliament.uk/members/lords/interests/register-of-lords-interests/>

Specialist Adviser

Dr Reece Lewis, Lecturer in Law, Cardiff University, and Academic Fellow, The Honourable Society of the Middle Temple

No relevant interests declared

APPENDIX 2: LIST OF WITNESSES

Evidence is published online at <https://committees.parliament.uk/committee/360/international-relations-and-defence-committee/publications/> and available for inspection at the Parliamentary Archives (020 7219 3074).

Evidence received by the Committee is listed below in the chronological order of oral evidence session and in alphabetical order. Those witnesses marked with ** gave both oral and written evidence. Those marked with * gave oral evidence and did not submit any written evidence. All other witnesses submitted written evidence only.

Oral evidence in chronological order

**	Professor Steven Haines, Professor of Public International Law, The University of Greenwich	QQ 1–9
*	Professor Malgosia Fitzmaurice, Professor of Public International Law, Queen Mary, University of London	QQ 1–9
*	Professor Sir Malcolm Evans, Professor of Public Law, University of Bristol	QQ 10–23
*	Dr Sofia Galani, Assistant Professor in International Law, Panteion University	QQ 24–29
**	Professor Natalie Klein, Faculty of Law, University of New South Wales, Australia	QQ 24–29
*	Dr Youri Van Logchem, Senior Lecturer, Institute of International Shipping and Trade Law, Hilary Rodham-Clinton School of Law, Swansea University	QQ 30–37
*	Dr Richard Caddell, Senior Lecturer in Law, Cardiff Law School	QQ 30–37
*	Commander Caroline Tuckett, Lead Legal Adviser on International Law, Royal Navy	QQ 38–50
*	Andrew Murdoch, Legal Advisor, Oceans Policy Unit, Foreign and Commonwealth Office	QQ 51–59
*	Professor Clive Schofield, Head of Research, WMU-Sasakawa Global Ocean Institute, World Maritime University	QQ 60–65
*	Dr Surabhi Ranganathan, Associate Professor and Co-Acting Director of Lauterpacht Centre for International Law, University of Cambridge	QQ 60–65
*	Admiral Sir Philip Jones, First Sea Lord (2016–2019)	QQ 66–77
**	Professor Douglas Guifoyle, Associate Professor of Law, University of New South Wales, Canberra	QQ 78–83
*	Professor Anna Petrig LL.M., Chair of International Law and Public Law, University of Basel	QQ 78–83

- ** Richard Barnes, Professor of International Law, University of Lincoln and Adjunct Professor of Law, Norwegian Centre of the Law of the Sea, University of Tromsø [QQ 84–95](#)
- * The Rt Hon The Lord Goldsmith of Richmond Park, Minister for the Pacific and the International Environment, Foreign, Commonwealth and Development Office and Department for Environment, Food and Rural Affairs [QQ 96–114](#)
- * Andrew Murdoch, Legal Director, Foreign, Commonwealth and Development Office [QQ 96–114](#)

Alphabetical list of witnesses

- Advisory Committee on Protection of the Sea (ACOPS) [UNC0017](#)
- Amnesty International UK [UNC0019](#)
- Judge David Anderson [UNC0045](#)
- ** Professor Richard Barnes, The Law School, The University of Lincoln, and Professor of Law, The University of Tromsø ([QQ 84–95](#)); and Professor Elizabeth Kirk, Lincoln Centre for Ecological Justice and The Law School, The University of Lincoln [UNC0015](#)
- Monim Benaissa, Part time Professor, Researcher at Public Law Centre, University of Ottawa, Faculty of Law, Ottawa, Canada [UNC0007](#)
- Professor Abbe E. L. Brown, Professor in Intellectual Property Law, Professor Marcel Jaspars, Chair in Chemistry and Dr Daria Shapovalova, Lecturer in Energy Law, University of Aberdeen [UNC0035](#)
- * Dr Richard Caddell, Senior Lecturer in Law, Cardiff Law School ([QQ 30–37](#))
- Dr Ioannis Chapsos, Assistant Professor; Dr James Malcolm, Assistant Professor; Dr Robert McCabe, Assistant Professor; Centre for Trust, Peace & Social Relations (CTPSR), Coventry University [UNC0002](#)
- Robin Churchill, Emeritus Professor of International Law, and Dr Jacques Hartmann, Reader in International Law, University of Dundee [UNC0011](#)
- Professor Edwin Egede, Professor of International Law and International Relations, Cardiff University School of Law and Politics [UNC0006](#)
- Environmental Justice Foundation [UNC0036](#)
- European Subsea Cables Association (ESCA) [UNC0031](#)
- * Professor Sir Malcolm Evans, Professor of Public Law, University of Bristol ([QQ 10–23](#))

- * Professor Malgosia Fitzmaurice, Professor of Public International Law, Queen Mary, University of London ([QQ 1-9](#))
Foreign, Commonwealth and Development Office [UNC0028](#)
- * Dr Sofia Galani, Assistant Professor in International Law, Panteion University ([QQ 24-29](#))
- * The Rt Hon The Lord Goldsmith of Richmond Park, Minister for the Pacific and the International Environment, Foreign, Commonwealth and Development Office and Department for Environment, Food and Rural Affairs ([QQ 96-114](#))
Global Marine Group [UNC0032](#)
Dr Montserrat Gorina-Ysern, Founder and President of Healthy Children-Healthy Oceans Foundation [UNC0020](#)
Greenpeace UK [UNC0025](#)
- ** Associate Professor Douglas Guilfoyle ([QQ 78-83](#)) and Professor Natalie Klein ([QQ 24-29](#)) [UNC0001](#)
- ** Steven Haines, Professor of Public International Law, School of Law and Criminology, University of Greenwich ([QQ 1-9](#)) [UNC0037](#)
Professor James Harrison, Professor of Environmental Law, Edinburgh Law School [UNC0010](#)
Dr Bill Hayton, Associate Fellow, Asia-Pacific Programme, Chatham House [UNC0012](#)
Human Rights at Sea [UNC0016](#)
International Seabed Authority [UNC0026](#)
- * Admiral Sir Philip Jones, First Sea Lord (2016-2019) ([QQ 66-77](#))
Dr Philipp Kastner LL.M, Senior Lecturer, Law School, University of Western Australia [UNC0029](#)
Hayley Keen & Charlotte Nichol [UNC0038](#)
- ** Professor Natalie Klein, Professor and Australian Research Council Future Fellow, UNSW Sydney, Faculty of Law & Justice ([QQ 24-29](#)) [UNC0047](#)
Natalie Klein, Professor of Law at UNSW, Sydney ([QQ 24-29](#)) Douglas Guilfoyle, Associate Professor UNSW, Canberra. Saiful Karim, Associate Professor, Queensland University of Technology. Professor Rob McLaughlin, Australian National University. [UNC0003](#)
Dr Lynn Kuok, Shangri-La Dialogue Senior Fellow for Asia-Pacific Security, International Institute for Strategic Studies [UNC0044](#)

- Dr Massimo Lando LL.M, Assistant Professor, School of Law, City University of Hong Kong and Dr Niccolò Ridi LL.M., Lecturer in Public International Law, The Dickson Poon School of Law, King's College London [UNC0041](#)
- Vaughan Lowe QC, Essex Court Chambers [UNC0046](#)
- Ministry of Defence [UNC0018](#)
- * Andrew Murdoch, Legal Advisor, Oceans Policy Unit, Foreign and Commonwealth Office ([QQ 51–59](#)) ([QQ 96–114](#))
- National Oceanography Centre [UNC0022](#)
- Nautilus International [UNC0023](#)
- Dr Alexandros X M Ntovas, Associate Professor (Reader) in Maritime Law, Director, Institute of Maritime Law, University of Southampton [UNC0023](#)
- Ocean Law Specialist Group, World Commission for Environmental Law (WCEL), International Union for Conservation of Nature (IUCN) [UNC0042](#)
- The One Ocean Hub [UNC0030](#)
- Professor David M Ong, Professor of International & Environmental Law, Nottingham Trent University, [UNC0039](#)
- Irini Papanicolopulu, Associate Professor of International Law, Andrea Longo, PhD candidate, and Daniele Mandrioli, Post-doctoral researcher, University of Milano-Bicocca [UNC0033](#)
- Dr Marianthi Pappa, Assistant Professor in Law, University of Nottingham [UNC0005](#)
- * Professor Anna Petrig LL.M, Chair of International Law and Public Law, University of Basel ([QQ 78–83](#))
- The Pew Charitable Trusts [UNC0040](#)
- * Dr Surabhi Ranganathan, Associate Professor and Co-Acting Director of Lauterpacht Centre for International Law, University of Cambridge ([QQ 60–65](#))
- Dr Hayley Roberts, Senior Lecturer in Public International Law, Bangor University [UNC0027](#)
- SafeSeas Network on Maritime Security [UNC0014](#)
- Jessica N M Schechinger, PhD Candidate in International Law and GTA, School of Law, University of Glasgow [UNC0043](#)
- * Professor Clive Schofield, Head of Research, WMU-Sasakawa Global Ocean Institute, World Maritime University ([QQ 60–65](#))

Andrew Serdy, Professor of Public International Law and Ocean Governance, University of Southampton [UNC0004](#)

Joanna Szuminska, alumna of the University of Sussex School of Law, Politics and Sociology [UNC0034](#)

* Commander Caroline Tuckett, Lead Legal Adviser on International Law, Royal Navy ([QQ 38–50](#))

* Dr Youri Van Logchem, Senior Lecturer, Institute of International Shipping and Trade Law, Hilary Rodham-Clinton School of Law, Swansea University ([QQ 30–37](#))

Sir Michael Wood KCMG [UNC0009](#)

APPENDIX 3: CALL FOR EVIDENCE

About 71 per cent of the Earth’s surface is covered with water, with around 96 per cent held in oceans, and around 80% of the volume of international trade in goods is carried by sea. Experts point out that the seas “have always been a source of power and wealth”, and nations have had to navigate through their ambitions to set clear maritime boundaries, while at the same time maintain an open transit and transport system for everyone.⁴⁴¹

The UN Convention on the Law of the Sea (UNCLOS) was signed in 1982 and came into force in 1994. It is frequently labelled the ‘Constitution of the Oceans’ and is a framework agreement.

In December 2020, at the 75th session of the UN General Assembly, the Government stated that UNCLOS is “a critical part of the rules-based international system” and that the UK is “fully committed to upholding its rules and securing the implementation of its rights and obligations.”⁴⁴² The UK’s statement reaffirmed the Government’s support for the legal framework for maritime claims⁴⁴³ and the rules of freedom of navigation and its application around the world (with explicit reference to the South China Sea).⁴⁴⁴

The Committee’s inquiry will explore the extent to which UNCLOS remains fit for purpose, the challenges facing its enforcement in 2021, and the extent to which the framework continues to reflect and uphold the UK’s interests. The inquiry will focus on issues of security, defence, climate change and international co-operation.

The call for evidence

The Committee is calling for written evidence on the questions below. The Committee will use the written evidence received to further shape its inquiry.

You do not need to answer all the questions to make a submission.

Diversity comes in many forms and hearing a range of different perspectives means that committees are better informed and can more effectively scrutinise public policy and legislation. Committees can undertake their role most effectively when they hear from a wide range of individuals, sectors or groups in society affected by a particular policy or piece of legislation. We encourage anyone with experience or expertise of an issue under investigation by a select committee to share their views with the committee, with the full knowledge that their views have value and are welcome.

441 Evans, M, Galani, S., (eds.), *Maritime Security and the Law of the Sea. Help or Hindrance?*, Elgar, 2020

442 Foreign Commonwealth and Development Office and Amy Townsend, UK Legal Counsellor and Deputy Legal Advisor at the UN, ‘Upholding the UN Convention on the Law of the Sea: National Statement at the UN General Assembly , 75th Session, on Oceans and the Law of the Sea’: <https://www.gov.uk/government/speeches/upholding-the-un-convention-on-the-law-of-the-sea> [accessed 7 February 2022]

443 Maritime Space: Maritime Zones and Maritime Delimitation, ‘Summary of National Claims’: <https://www.un.org/depts/los/LEGISLATIONANDTREATIES/claims.htm> [accessed 7 February 2022]

444 Foreign Commonwealth and Development Office and Amy Townsend, UK Legal Counsellor and Deputy Legal Advisor at the UN, ‘Upholding the UN Convention on the Law of the Sea: National Statement at the UN General Assembly , 75th Session, on Oceans and the Law of the Sea’: <https://www.gov.uk/government/speeches/upholding-the-un-convention-on-the-law-of-the-sea> [accessed 7 February 2022]

General

1. What have been the main successes and accomplishments of UNCLOS over the past 40 years?
2. Which countries are the key international actors influencing the international law of the sea? What are their approaches towards UNCLOS?
3. How is UNCLOS enforced and how successful is its enforcement? How successful is dispute resolution under UNCLOS?
4. What are the other important international agreements and treaties which complement UNCLOS?
5. What is the role of the International Maritime Organisation (IMO) and other international organisations in developing UNCLOS and the law of the sea?

Challenges

6. What are the main challenges facing the effective implementation of UNCLOS in 2021? We would particularly welcome responses on:
 - Climate change and the impact it has had/will have on the structures and provisions of UNCLOS (including trading routes, maritime boundaries, and the status of island ocean states)
 - Maritime security and human rights at sea (including migration, modern slavery and human trafficking)
 - Autonomous maritime vehicles (both commercial and military), cybersecurity, and other new technologies
 - Regulation of access to economic resources, including on the deep seabed and in the water column, fishing, and the protection of resources such as undersea cables
7. In light of these challenges, is UNCLOS still fit for purpose? Can or should UNCLOS be renegotiated to better address these challenges?

UK's Maritime Strategy

8. What is your assessment of the UK's policy and practice within the current legal framework of the international law of the sea? Are the Government currently working to address any of the challenges outlined above?
9. What should be the priorities for the UK Government regarding the future of UNCLOS and the international law of the sea? In what areas can or should the UK be a leader?
10. What will be the most important international partnerships and alliances for the UK in addressing these challenges and upholding its interests with regards to the law of the sea?
11. In light of the challenges posed by climate change to the provisions of UNCLOS, what considerations should be given to the law of the sea during and after COP26, and what should be the position of the UK Government?

APPENDIX 4: ACRONYMS

BBNJ	Biodiversity Beyond National Jurisdiction Agreement
CBD	United Nations Convention on Biodiversity
EEZ	Exclusive Economic Zone
ICJ	The International Court of Justice
IHO	International Hydrographic Office
ILC	United Nations International Law Commission
ILO	International Labour Organization
IMO	International Maritime Organization
IPCC	Intergovernmental Panel on Climate Change
ISO	Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (UNESCO)
ISA	International Seabed Authority
ITLOS	The International Tribunal for the Law of the Sea
IUU fishing	Illegal, Unreported and Unregulated fishing
MARPOL	International Convention for the Prevention of Pollution from Ships
MAV	Maritime Autonomous Vehicle
MGR	Marine Genetic Resources
MLC	Maritime Labour Convention
MPA	Marine Protected Area
PCASP	Privately contracted armed security personnel
PIF	Pacific Islands Forum
RFMO	Regional Fisheries Management Organization
SAR	International Convention on Maritime Search and Rescue
SOLAS	International Convention for the Safety of Life at Sea
SPLOS	State Parties to UNCLOS
STCW	International Convention on Standards of Training, Certification and Watchkeeping of Seafarers
SUA	Convention for the Suppression of Unlawful Acts Against the Safety of Maritime Navigation
UNFCCC	United Nations Framework Convention on Climate Change
UNFSA	United Nations Fish Stocks Agreement
UNTOC	United Nations Convention against Transnational Organised Crime