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INTERNATIONAL TRIBUNAL FOR THE LAW OF THE SEA

REQUEST FOR AN ADVISORY REQUEST SUBMITTED BY THE COMMISSION OF SMALL ISLAND STATES ON CLIMATE CHANGE AND INTERNATIONAL LAW

(CASE No. 31)

WRITTEN STATEMENT OF FRANCE

16 June 2023

1. In its Order of 16 December 2022, the International Tribunal for the Law of the Sea (hereinafter "the Tribunal") invited States Parties to the United Nations Convention on the Law of the Sea (hereinafter "UNCLOS") to present written statements on the request for an advisory opinion submitted on 12 December 2022 by the Commission of Small Island States on Climate Change and International Law.

2. This request for an opinion concerns the following question:

> What are the specific obligations of State Parties to the United Nations Convention on the Law of the Sea (the "UNCLOS"), including under Part XII:
>
> (a) to prevent, reduce and control pollution of the marine environment in relation to the deleterious effects that result or are likely to result from climate change, including through ocean warming and sea level rise, and ocean acidification, which are caused by anthropogenic greenhouse gas emissions into the atmosphere?
>
> (b) to protect and preserve the marine environment in relation to climate change impacts, including ocean warming and sea level rise, and ocean acidification?

3. In its Order of 15 February 2023, the Tribunal fixed 16 June 2023 as the time-limit for the presentation of written statements.

4. The observations which France considers it should submit to the Tribunal on this request for an advisory opinion relate to (i) the Tribunal's jurisdiction to give such an opinion, (ii) the appropriateness of complying with the request submitted, (iii) the law applicable to this request, and (iv) the substance of the answers which should be given to the question raised.

5. At the outset, France wishes to reiterate that it is fully aware of the impacts and adverse effects of climate change on oceans, which play a key role in climate regulation.[1] It furthermore wishes to recall that it attaches special importance to compliance with international obligations pertaining to the marine environment and that it remains thoroughly committed to combating climate change and its effects. At present, there are a variety of initiatives, instruments and solutions whose primary aim is to ensure that they are implemented practically and effectively. In this context, France endorses the written statement filed by the European Union as well as all the international, regional and national endeavours seeking to reduce greenhouse gases with the loftiest of ambitions and to combat climate change. France refers in particular to the joint declaration issued at the 5th France-Oceania Summit on 19 July 2021, which reaffirmed the "shared commitment to effectively combat climate change, halt the loss of biodiversity and address the climate-ocean nexus".[2]

6. In this respect, France welcomes initiatives aimed at providing any clarifications that may prove necessary for the interpretation of international obligations applicable to States Parties to UNCLOS to preserve and protect the marine environment in relation to climate change. In the same spirit, it recently co-sponsored the United Nations General Assembly resolution referring to the International Court of Justice (hereinafter

[1] See, for example, the declaration made by France before the United Nations Security Council on 14 February 2023, S/PV.9260 at the meeting on sea-level rise and its implications for international peace and security, pp. 17-18.

[2] See [https://www.elySee.fr/emmanuel-macron/2021/07/19/declaration-conjointe-a-loccasion-du-5e-sommet-france-oceanie], para. 3.

"ICJ") a request for an advisory opinion on the *Obligations of States in respect of Climate Change*.[3]

I. Jurisdiction of the Tribunal to rule on the request for an advisory opinion

7. The present request for an advisory opinion was introduced by the Commission on the basis of article 21 of the Statute of the Tribunal and article 138 of its Rules.[4] In accordance with international law, of which the Tribunal is one of the bodies, this request must be dealt with in a manner consistent with the particular functions of the Tribunal and the rules which govern them.

8. In the first request for an advisory opinion submitted to the Tribunal (Case No. 21), France had indicated in its written statement of 29 November 2013 that it did not seem to clearly follow from article 21 of the Statute and article 138 of the Rules, read together, that the Tribunal had jurisdiction to entertain the request for an opinion submitted to it in that case,[5] and the question arose before the Tribunal whether it had such advisory jurisdiction. France takes note of the Tribunal's interpretation of these two provisions in its advisory opinion of 2 April 2015 and of its conclusion that they confer advisory jurisdiction upon it.[6] It also takes note of the observations of States Parties to UNCLOS, made at the twenty-fifth Meeting of States Parties to the Convention, on the Tribunal's interpretation and conclusion.[7]

9. Although the principle of the Tribunal's advisory jurisdiction now seems to be accepted, this jurisdiction is nonetheless limited. In the recently concluded agreement[8] on the conservation and sustainable use of marine biological diversity of areas beyond

[3] See the request for an advisory opinion of 12 April 2023, further to resolution 77/276 of 29 March 2023 of the United Nations General Assembly.
[4] See Request for Advisory Opinion of 12 December 2022, p. 1.
[5] See : https://www.itlos.org/fileadmin/itlos/documents/cases/case_no.21/written_statements_round1/C21_23_France_orig_Fr.pdf, pp. 1-2.
[6] ITLOS, Advisory Opinion, 2 April 2015, *Request for an Advisory Opinion submitted by the Sub-Regional Fisheries Commission (SRFC) (Request for Advisory Opinion submitted to the Tribunal), ITLOS Reports 2015*, pp. 18-25, paras. 37-69.
[7] SPLOS/287, 13 July 2015, para. 23.
[8] The term "BBNJ Agreement" used in the present written statement refers to the agreement scheduled for adoption at the resumed fifth session of the Intergovernmental Conference on 19 June.

national jurisdiction (hereinafter "the BBNJ Agreement"), the Member States of the United Nations set out a strict framework for such advisory jurisdiction.[9]

10. In its opinion of 2 April 2015, the Tribunal recalled in more general terms that requests for an advisory opinion may be submitted to it only if three prerequisites are satisfied, namely, "an international agreement related to the purposes of the Convention specifically provides for the submission to the Tribunal of a request for an advisory opinion; the request must be transmitted to the Tribunal by a body authorized by or in accordance with the agreement mentioned above; and such opinion may be given on 'a legal question'."[10]

11. Moreover, it stands to reason that the Tribunal cannot rule on every type of question. As in contentious proceedings, its advisory jurisdiction is necessarily circumscribed *ratione materiae*. It is therefore for the Tribunal to determine "to what matters the advisory jurisdiction extends" in each case.[11] This last observation calls for four remarks.

12. *First*, the Tribunal was constituted and functions in accordance with UNCLOS, as set out in article 1, paragraph 1, of the Statute of the Tribunal and as follows from Part XV of the Convention. Inherent limitations on the Tribunal's advisory jurisdiction inevitably result from the fact that it was constituted, and functions in accordance with, the Convention alone. As the Seabed Disputes Chamber and later the Tribunal have emphasized, the advisory jurisdiction they exercise is intended to contribute "to the implementation of the Convention's regime."[12]

13. *Second*, article 2, paragraph 2, of the Agreement for the Establishment of the Commission on Small Island States on Climate Change and International Law is precise in the limit it places on the scope of the Tribunal's jurisdiction *ratione materiae* in the present case. This article specifies that it authorizes the Commission to request an

[9] See https://www.un.org/bbnj/sites/www.un.org.bbnj/files/draft_agreement_advanced_unedited.pdf, article 47, para. 7, of the current text.
[10] *ITLOS Reports 2015, op. cit.* p. 22, para. 60.
[11] *ITLOS Reports 2015, op. cit.* p. 24, para. 67.
[12] ITLOS, Advisory Opinion, 1 February 2011, *Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area (Request for Advisory Opinion submitted to the Seabed Disputes Chamber), ITLOS Reports 2011*, p. 24, para. 30; *ITLOS Reports 2015, op. cit.*, p. 26, para. 77.

advisory opinion from the Tribunal only on a legal question "within the scope of the 1982 UNCLOS".[13] This limit is stricter than that which arises from article 138 of the Rules, which refers more broadly to agreements "related to the purposes of the Convention".

14. *Third*, the Tribunal's jurisdiction *ratione materiae* in the present case is limited by the very wording of the request submitted to it.

15. First of all, it is clear from the wording of the request for an opinion that the Tribunal is called upon to solely identify existing obligations (since the request asks the Tribunal only to determine "[w]hat are" the specific obligations of States Parties to UNCLOS), and not to consider what those obligations should or ought to have been, or their implementation or any factual matter. As the International Court of Justice has pointed out, a court's advisory function is not to "legislate" but to ascertain "the existence or otherwise of legal principles and rules", which may require, by stating the law, "specify[ing] its scope and sometimes not[ing] its general trend."[14] As the Tribunal noted in its 2015 opinion, "it does not take a position on issues beyond the scope of its judicial functions" and can therefore rule only *lex lata* and not *lex ferenda*.[15] In the present case, this means that "the focus under Part XII [of the UNCLOS] has to be on what States have actually agreed rather than on what they should have agreed in some ideal scenario."[16]

16. Moreover, the request relates exclusively to the specific obligations "of States Parties to the United Nations Convention on the Law of the Sea". Two observations are in order here. First, the use of the plural ("of States Parties") implies that the aim of the request for an opinion is not to identify the obligations incumbent on each of the States

[13] *UN Treaty Series*, No. I-56940. V. R. Holst, "Taking the Current When It Serves: Prospects and Challenges for an ITLOS Advisory Opinion on Oceans and Climate Change", *Review of European, Comparative and International Environmental Law,* November 2022.
URL: https://onlinelibrary.wiley.com/doi/10.1111/reel.12481, pp. 4-5: "This means that the Tribunal cannot extend jurisdiction *ratione materiae* to other areas of international law, unless this would be truly incidental to the interpretation and application of UNCLOS".
[14] ICJ, Advisory Opinion, 8 July 1996, *Legality of the Threat or Use of Nuclear Weapons*, *I.C.J. Reports 1996,* p. 237, para. 18.
[15] *ITLOS Reports 2015, op. cit.*, p. 25, paras. 73-74.
[16] A. Boyle, "Litigating Climate Change under Part XII of the LOSC", *The International Journal of Marine and Coastal Law,* 2019, vol. 34, pp. 480-481.

Parties individually but to identify the specific obligations the Convention imposes on all the States Parties. Second, the request makes no mention of the obligations owed under the agreement on the basis of which the case was referred to the Tribunal. Nor does the question put to the Tribunal appear to refer implicitly to that agreement. It follows that, unlike the situation in the previous advisory proceedings before the Tribunal,[17] the obligations specifically owed under the agreement on the basis of which the present case was referred to the Tribunal do not fall within the Tribunal's jurisdiction *ratione materiae*. The Tribunal's jurisdiction is limited to specific obligations under UNCLOS, "including under Part XII" thereof, to reproduce the wording of the request for an opinion.

17. According to its wording, this question also relates solely to "specific" obligations. This adjective must be understood in the context of the present request for an opinion as seeking to determine how the obligations arising from UNCLOS with regard to pollution, preservation and protection of the marine environment are to be interpreted and applied "in relation" to the "deleterious effects" and "impacts" of climate change and ocean acidification "which are caused by anthropogenic greenhouse gas emissions into the atmosphere."

18. *Fourth*, as in contentious proceedings, jurisdiction should not be conflated with applicable law. As the Tribunal emphasized in the *Norstar* case, "a distinction must be made between the question of its jurisdiction, on the one hand, and the applicable law, on the other"; "article 293 of the Convention on applicable law may not be used to extend the jurisdiction of the Tribunal."[18] This jurisdiction is limited in the present case to obligations under UNCLOS and in particular its Part XII. Under the customary rule of interpretation reflected in article 31 of the Vienna Convention on the Law of Treaties, the Tribunal will have to interpret each relevant provision of UNCLOS "in the light of" other provisions of the Convention and the "indications" they may give.[19] To interpret UNCLOS, the Tribunal may also have recourse to applicable rules other than that text (see III below), as they might, if necessary, assist in interpreting the obligations owed

[17] *ITLOS Reports 2015, op. cit.*, p. 23, para. 65 and p. 27, para. 84.
[18] ITLOS, Judgment, 10 April 2019, *The M/V "Norstar" Case (Panama* v. *Italy), ITLOS Reports 2019*, p. 47, para. 136.
[19] *ITLOS Reports* 2015, *op. cit.*, p. 34, para. 110 and p. 54, paras. 188-189. See also PCIJ, Judgment, 28 June 1937, *The Diversion of Water from the Meuse*, Series A/B, No. 70, p. 21, para. 59.

under the Convention.[20] However, it is not for the Tribunal to give an advisory opinion meant to identify obligations other than those due under UNCLOS. To do so would be tantamount to granting the Tribunal unlimited *ratione materiae* advisory jurisdiction, which would not be consistent either with UNCLOS or with the Statute and the Rules of the Tribunal.

II. Appropriateness of responding to the request for an advisory opinion

19. In its advisory opinion of 2 April 2015, the Tribunal held that it has a discretionary power to refuse to give an advisory opinion and that this power should be exercised only where there are "compelling reasons".[21]

20. As long as the Tribunal considers that it has jurisdiction to consider the present request for an opinion, there do not appear to be any compelling reasons why the Tribunal should not exercise this jurisdiction. That being said, a number of factors must be taken into account in order to circumscribe precisely the manner in which the Tribunal may exercise its jurisdiction in the present case.

21. First, France notes the twofold reminder issued by the Tribunal in 2015 that (i) the exercise of the advisory function consists in enlightening the applicant "as to [its] course of action" by providing it with "guidance in respect of its own actions" and (ii) the opinion "is given only to" the applicant.[22] The Tribunal will have to identify what may be necessary for the Commission for the purposes of its own actions in order to determine the scope and extent of the responses to be given to the present request for an opinion. This consideration echoes the previous decisions of the International Court of Justice, which has held that the question submitted for an advisory opinion "must be one arising within the scope of the activities of the requesting agency", which requires "delineat[ing] the field of activity or the area of competence" of that agency, in

[20] The objective behind the creation of the Commission has been described as being to give the Tribunal "the opportunity to articulate the relevant climate-related legal rights and obligations *under the LOSC*". V. D. Freestone, R. Barnes and P. Akhavan, "Agreement for the Establishment of the Commission of Small Island States on Climate Change and International Law", *International Journal of Marine and Costal Law*, 2022, p. 166 (emphasis added).
[21] *ITLOS Reports 2015*, *op. cit.*, p. 25, para. 71.
[22] *ITLOS Reports 2015 op. cit.*, p. 26, para. 76.

compliance with the principle of speciality of the competence of international organizations.[23]

22. In addition, given that the vast majority of States Parties to UNCLOS "did not take part in drafting the questions" asked,[24] the Tribunal must proceed with particular caution in exercising its advisory jurisdiction in the instant case, since the request seeks to identify and interpret obligations that concern all parties to UNCLOS and not those which concern only the member States of the Commission.

23. In its 2015 opinion, the Tribunal held that, "in advisory proceedings the consent of States not members of [the requesting organization] is not relevant", since that opinion "is given only to" that organization.[25] However, a distinction must be drawn between the situation in which the request for an opinion relates principally to the rules of the agreement on the basis of which the case is referred to the Tribunal (and thus the requesting organization and its member States are the main parties concerned by the opinion to be given) and the situation in which – as in the present case – the request for an opinion does not relate to the obligations owed under the agreement on the basis of which the case is referred to the Tribunal but to the obligations owed by the States Parties to UNCLOS under that agreement. In the latter scenario, the States concerned by the request for an advisory opinion are all the States Parties to the Convention and not just the member States of the requesting organization. In such a situation, the Tribunal must give due consideration to the views and positions of all the States Parties to UNCLOS, and in particular of those that did not initiate the request for an advisory opinion, including by organizing a second round of written statements, if necessary.[26]

24. This consideration is all the more important since the Tribunal's opinion on the present request will not be limited in scope to the requesting organization alone but will necessarily have a more general scope for all the parties to UNCLOS. A special chamber of the Tribunal held in a judgment of 28 January 2021 that "an advisory

[23] *I.C.J. Reports 1996 op. cit.*, pp. 71-72, para. 10; p. 74, para. 19; and pp. 78 *et s.*, paras. 25 *et s.*
[24] To repeat *mutatis mutandis* Judge Cot's phrasing in his declaration attached to the Advisory Opinion of 2 April 2015: see *ITLOS Reports 2015, op. cit.*, p. 74, para. 8.
[25] See *ITLOS Reports 2015, op. cit.*, p. 26, para. 76.
[26] At this stage of the proceedings, the Tribunal has provided for the presentation of written statements and for oral proceedings to take place, while "reserv[ing] the subsequent procedure" (See Order of 16 December 2022).

opinion entails an authoritative statement of international law on the questions with which it deals" and that "judicial determinations made in advisory opinions carry no less weight and authority than in judgments".[27] France is of the view that an advisory opinion as such does not have the same legal scope as a judgment delivered in accordance with the principle of consent to jurisdiction. As the Tribunal underscored in its 2015 opinion, "[an] advisory opinion as such has no binding force".[28] To the extent, however, that the Tribunal is expected in the present case to render an authoritative opinion on the interpretation of UNCLOS, it is important that the views expressed by all States Parties to the Convention be duly taken into account.

25. Lastly, the Tribunal will have to consider the specific context in which this request for an opinion has been made.

26. On the one hand, it will be for the Tribunal to rule on the request for an advisory opinion having regard to the fact that, at the same time and by a decision adopted by consensus of the Member States of the United Nations General Assembly, the International Court of Justice has received a request for an advisory opinion which partially overlaps with the question put to the Tribunal by the Commission. This request relates in particular to the identification of the obligations of States under international law "to ensure the protection of the climate system and other parts of the environment against anthropogenic emissions of greenhouse gases for States and for present and future generations", "[h]aving particular regard to […] the United Nations Convention on the Law of the Sea".[29] France is of the opinion that the Tribunal and the Court will be all the more likely to converge in their respective legal conclusions – as is highly expected – if they confine themselves to determining existing law in light of the views expressed by all the States.

27. On the other hand, the commitments of States to combat climate change are in a constant process of negotiation, clarification and implementation. In comparable

[27] ITLOS, Judgment on Preliminary Objections, 28 January 2021, *Dispute concerning delimitation of the maritime boundary between Mauritius and Maldives in the Indian Ocean (Mauritius/Maldives)*, paras. 202-203.
[28] See *ITLOS Reports 2015*, *op. cit.* p. 26, para. 76; see also ICJ, Advisory Opinion, 30 March 1950, *Interpretation of Peace Treaties with Bulgaria, Hungary and Romania, I.C.J. Reports 1950*, p. 71: "The Court's reply is only of an advisory character: as such, it has no binding force."
[29] See the aforementioned request for an advisory opinion submitted to the ICJ.

circumstances, the International Law Commission considered it appropriate to limit its work on the codification and progressive development of law on the protection of the atmosphere, so that the preparation of its draft guidelines on the topic does not "interfere with relevant political negotiations or […] impose on current treaty regimes rules or principles not already contained therein."[30] These considerations should likewise prevail *mutatis mutandis* in the present advisory proceedings.

28. In addition, and in connection with the reference made to sea level rise in the question put to the Tribunal, it is important to recall that the International Law Commission is currently undertaking work on sea level rise from the perspective of international law, in particular with regard to its effects on the law of the sea. Since 2018, there have been lively exchanges on this topic between the International Law Commission and the Member States meeting at the Sixth Committee of the United Nations General Assembly.[31] Significant progress is being made in the identification of possible legal solutions to the challenges that sea level rise poses to the law of the sea, as reflected in the latest addendum to the issues paper prepared by the co-chairs of the International Law Commission Study Group of February 2023.[32] The topic, from the more specific angle of its consequences for international peace and security, has also been brought before the Security Council where it has been debated as of February 2023.[33] The present advisory proceedings should not prejudice these efforts within the United Nations to reach constructive solutions on a topic that is as complex as it is important.

III. Law applicable to the request for an opinion

29. In accordance with article 293 of the Convention, which pertains to advisory proceedings, the Tribunal shall, for the purpose of exercising its jurisdiction over

[30] See the last preambular paragraph of the draft guidelines adopted by the ILC in 2021 on protection of the atmosphere, A/76/10, p. 14.
[31] See, for example, the summary of the discussions of the Sixth Committee on the work of the ILC of the 2022 session, A/CN.4/755 of 6 February 2023, paras. 47-80.
[32] See A/CN.4/761 of 13 February 2023.
[33] See S/PV.9260 of 14 February 2023. According to Malta, which initiated these debates as part of its Presidency of the Council, the "climate-security nexus is present in its impact on our ocean – the single largest habitat on our planet." (S/2023/79 of 2 February 2023, p. 3).

questions submitted to it, apply "this Convention and other rules of international law not incompatible with this Convention."[34]

30. Given the broad scope of the question addressed to the Tribunal, it is important to methodically establish the law applicable to the present request for an opinion. In particular, this requires the Tribunal to identify, "after consideration of the great corpus of international law norms available to it, what might be the relevant applicable law" and, more specifically, the "most directly relevant" applicable law.[35]

31. The law applicable to this opinion is composed of three main parts.

A. UNCLOS

32. First, there is no doubt that the Convention itself forms part of the applicable law. It constitutes its very core, since the Tribunal's jurisdiction is limited to it. As follows from the question put to the Tribunal, it is above all ("including") Part XII of the Convention that must be examined insofar as it deals specifically with the preservation and protection of the marine environment.

33. Three additional points must be specified here.

(i) Not all the obligations in Part XII are necessarily relevant. Since the request for an opinion relates only to "specific" obligations of States Parties, the Tribunal's response should focus on those provisions of Part XII that identify such specific obligations "in relation to the deleterious effects that result or are likely to result from climate change" and "climate change impacts" and "ocean acidification" on the marine environment.

[34] See *ITLOS Reports 2015, op. cit.* p. 27, paras. 80-84.
[35] See, *mutatis mutandis*, *I.C.J. Reports 1996 op. cit.*, p. 239, para. 23, and p. 243, para. 34; see also article 31, para. 3, (c), of the Vienna Convention on the Law of Treaties which refers to "any relevant rules of international law applicable in the relations between the parties."

(ii) To interpret these provisions of Part XII, it may be necessary to refer to other provisions of the Convention as part of their "context" under the general rule of interpretation reflected in article 31 of the Vienna Convention on the Law of Treaties. These may be provisions in Part XII or in other parts of the Convention.

(iii) Only if a provision in a part other than Part XII is directly relevant to the present request for an opinion can it be analysed as such. This is unquestionably so with article 1, which defines "pollution of the marine environment".

B. Rules expressly mentioned or referenced in UNCLOS

34. Since UNCLOS forms part of the law applicable by the Tribunal, it is self-evident that the rules expressly mentioned or referenced by the very provisions of the Convention relevant for the purposes of the request for an opinion must be taken into consideration in the context of the applicable law.

35. However, they may be considered only to the extent and within the limits provided for by the Convention itself when it mentions or references external rules. This precision is important given that the provisions of UNCLOS that refer to external rules do so using different terms and with different legal effects depending on the situation. For example:

(i) With regard to marine pollution from vessels, article 211 requires States to adopt laws and regulations that "*shall at least* have the same effect as that of generally accepted international rules and standards";

(ii) On the other hand, article 207, paragraph 1, and article 212, paragraph 1, require States to act "*taking into account* internationally agreed rules, standards and recommended practices and procedures";

(iii) These differences in the way in which the Convention refer to external rules must be duly considered; it is plain that they have a bearing on the legal scope of the reference thus made to external rules. This scope must be assessed provision by relevant provision. It will be for the Tribunal, insofar as a provision of UNCLOS making such a reference is deemed to impose a specific obligation within the meaning of the request for an opinion, to determine the legal effect of that reference and to identify the specific legal consequences produced by that reference in relation to what is expected of States Parties to UNCLOS.

C. Other rules external to UNCLOS

36. To the extent that the provisions of UNCLOS, including the external rules which the Convention references, are not sufficient to determine the content of the specific obligations of States Parties to UNCLOS, the Tribunal could then have recourse to other means of interpretation to determine the meaning of those obligations in accordance with the customary rules reflected in articles 31 to 33 of the Vienna Convention on the Law of Treaties,[36] in particular by identifying any subsequent agreement or practice between the parties to UNCLOS that would be relevant for the purposes of the present request for an opinion; identifying any relevant rules of international law (customary law in particular) applicable in the relations between the parties to UNCLOS; and deploying, where necessary, customary techniques of interpretation such as the principle of *effet utile* or evolutive interpretation.[37]

37. The requesting organization appears to consider that the most directly relevant agreements apart from UNCLOS are the 1992 Framework Convention on Climate Change (hereinafter "the UNFCCC") and the 2015 Paris Agreement; these are the only two legal instruments it has included in the dossier that it submitted to the Tribunal in support of its request for an advisory opinion. France concurs that these two agreements are directly relevant to the present request for an opinion.

[36] See *ITLOS Reports 2011*, *op. cit.* p. 28, para. 57.
[37] With regard to these interpretative techniques which supplement the means of interpretation, see, for example, M. Forteau, A. Miron, A. Pellet, *Droit international public*, LGDJ, Paris, 2022, pp. 344-350.

38. In using external rules to interpret UNCLOS, regard should be had to the need for consistency and mutual supportiveness between applicable rules, which is strictly formulated in UNCLOS. France attaches great importance to this necessity which must make it possible to maintain consistency of international law and preserve the place and central role of UNCLOS which establishes "a legal order for the seas and oceans" as stated in its preamble. This need for consistency and mutual supportiveness, which the ILC also endorsed in its draft guidelines on the protection of the atmosphere,[38] takes several explicit forms in the Convention.

39. As mentioned above, article 293 of UNCLOS authorizes recourse to other applicable rules only insofar as they are "not incompatible with this Convention." [39]

40. In addition, article 311, paragraph 2, of UNCLOS states that it

> shall not alter the rights and obligations of States Parties which arise from other agreements compatible with this Convention and which do not affect the enjoyment by other States Parties of their rights or the performance of their obligations under this Convention.

41. In the same vein, article 237 of UNCLOS states:

> 1. The provisions of this Part [XII of the Convention] are without prejudice to the specific obligations assumed by States under special conventions and agreements concluded previously which relate to the protection and preservation of the marine environment and to agreements which may be concluded in furtherance of the general principles set forth in this Convention.
>
> 2. Specific obligations assumed by States under special conventions, with respect to the protection and preservation of the marine environment, should be carried out in a manner consistent with the general principles and objectives of this Convention.

[38] See Guideline 9, in Report of the ILC on the work of its 72nd session (2021), A/76/10, pp. 39 *et s.* As stated in paragraph 1 of Guideline 9: "The rules of international law relating to the protection of the atmosphere and other relevant rules of international law, including, *inter alia*, the rules (...) of the law of the sea (...) should, to the extent possible, be identified, interpreted and applied in order to give rise to a single set of compatible obligations, in line with the principles of harmonization and systemic integration, and with a view to avoiding conflicts."
[39] See *ITLOS Reports 2015, op. cit.*, p. 27, paras. 80-84.

42. This provision enshrines a form of reciprocal mutual respect: on the one hand, the Convention does not prohibit the conclusion of agreements imposing specific obligations on States with regard to the marine environment; on the other hand, such agreements imposing specific obligations must be implemented in a manner compatible with UNCLOS, at the very least with its "general principles and objectives".

43. It follows clearly from the text of articles 311 and 237 that these are compatibility clauses. It is not possible, however, to regard them as reference clauses, which would allow the external rules referred to in UNCLOS to be incorporated or integrated therein and thereby broaden the obligations incumbent on States Parties to UNCLOS under the Convention.

44. In its 2011 opinion, the Seabed Chamber considered whether a "without prejudice" clause "may be used to fill a gap in the liability regime established in Part XI of the Convention";[40] it decided in the opinion, however, that it could not.[41]

45. For its part, the arbitral tribunal in the *South China Sea* case expressed the view that "[t]he content of the general obligation in Article 192 [of UNCLOS] is further *detailed* in the subsequent provisions of Part XII, including Article 194, *as well as by reference to specific obligations set out in other international agreements, as envisaged in Article 237 of the Convention.*"[42] However, it cannot be said that article 237 "details" the content of the obligations due under UNCLOS by means of a "*reference*" to external rules. Article 237 does not incorporate these external obligations into the Convention (i.e., it does not reference them in the legal sense of the term). The object of this article is, in accordance with the need for consistency and mutual supportiveness, to specify how UNCLOS is to relate to the specific obligations beyond the Convention and vice versa.

[40] *ITLOS Reports 2011, op. cit.*, p. 68, para. 208.
[41] *Ibid*., paras. 209-211, pp. 65-66.
[42] PCA, 12 July 2016, *South China Sea Award (Republic of the Philippines/People's Republic of* China), para. 942, p. 374 (emphasis added) (available at: [https://pcacases.com/web/sendAttach/2086]).

IV. Points in response to the question put to the Tribunal

46. As a preliminary point, before presenting the observations in response to the question put by the Commission to the Tribunal (see IV.1 and IV.2 below), it would seem useful to clarify the definition of "marine environment", which underlies the entirety of the present request for an opinion, in each of its two subbranches (a) and (b). This definition seems essential in order to circumscribe the scope of the specific obligations that the requesting organization is asking the Tribunal to identify.

Definition of "marine environment"

47. While article 1, paragraph 4, defines the term "pollution of the marine environment" for the purposes of the Convention, the concept of "marine environment" is not defined as such in UNCLOS. Despite the lack of a definition, certain provisions of the Convention – as well as certain external rules which, along with the context, must be taken into account to interpret the Convention in accordance with the general rule of interpretation codified in article 31 of the Vienna Convention on the Law of Treaties – enable the spatial and physical contours of this concept to be distinguished.

48. In geographical terms, it is clear that the marine environment, as the subject of Part XII of the Convention relating to its protection and preservation, includes all maritime areas governed by UNCLOS, whether they are under the sovereignty or jurisdiction of a coastal State or beyond national jurisdiction. Article 193 of UNCLOS, which provides that States "have the sovereign right to exploit their natural resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment," would serve no purpose if internal waters, the territorial sea, the exclusive economic zone and the continental shelf under the jurisdiction of coastal States were excluded from this definition. In 2015, the Tribunal held that "article 192 applies to all maritime areas, including those encompassed by exclusive economic zones".[43] Similarly, the arbitral tribunal in the *South China Sea* case asserted that "the obligations in Part XII apply to all States with respect to the

[43] *ITLOS Reports 2015, op. cit.* p. 37, para. 120.

marine environment *in all maritime areas, both inside the national jurisdiction of States and beyond it*."[44] The high seas and the Area are therefore equally concerned.

49. On the other hand, the question of whether coastal areas also form part of the "marine environment" is more difficult to answer. Case law on maritime delimitation seems to make an absolute distinction between land (including the coast) and sea, in particular through the principle that "land dominates the sea",[45] the characterization of maritime areas as projections of the coastal fronts[46] and the distinction in principle between the terminal point of the land boundary on the coast and the starting point of the maritime boundary.[47] However, such a binary approach is not necessarily warranted when the protection and preservation of the marine *environment* are at stake.

50. Some provisions of the Convention refer expressly to the "coastline"[48] and even seem to include it in the marine environment when it comes to combating pollution.[49] The absence of a uniform legal definition of "coastline" nevertheless calls for a degree of caution.[50] Like "estuaries", which article 1, paragraph 1, subparagraph 4, of UNCLOS also seems to include in the marine environment,[51] coastlines are taken into consideration in the Convention only insofar as they constitute areas at the interface between land and sea. Thus, the intertidal zone (the foreshore), as part of the coastline covered at high tide, and the estuary, as an area where freshwater and marine water mix

[44] See PCA, Award of 12 July 2016, *op. cit.*, p. 373, para. 940 (emphasis added).
[45] ICJ, Judgment, 20 February 1969, *North Sea Continental Shelf (Federal Republic of Germany/Denmark; Federal Republic of Germany/Netherlands), I.C.J. Reports 1969*, p. 51, para. 96.
[46] ITLOS, Judgment, 14 March 2012, *Dispute concerning the delimitation of the maritime boundary between Bangladesh and Myanmar in the Bay of Bengal (Bangladesh/Myanmar), ITLOS Reports 2012*, p. 56, para. 185.
[47] See, for example, ICJ, Judgment, 27 January 2014, *Maritime Dispute (Peru* v. *Chile), I.C.J. Reports 2014*, p. 64, para. 175.
[48] See article 211, para. 7 ("prompt notification to coastal States, whose coastline or related interests may be affected by […] maritime casualties"); article 220, para. 6 (which refers to "major damage to the coastline or related interests of the coastal State"), or article 221, para. 1 (right of States to take "measures […] proportionate to the actual or threatened damage to protect their coastline or related interests, including fishing, from pollution or threat of pollution following upon a marine casualty").
[49] Article 145 of UNCLOS states that the International Seabed Authority (to ensure effective protection for the marine environment from harmful effects which may arise from activities in the Area) shall adopt appropriate rules, regulations and procedures for, *inter alia*, "the prevention, reduction and control of pollution and other hazards to the marine environment, *including the coastline*" (emphasis added). Similarly, article 211, para. 1 specifies that States shall promote the adoption of vessel routeing systems "designed to minimize the threat of accidents which might cause pollution of the marine environment, including the coastline" (emphasis added).
[50] In France, for example, article 1 of the "coastal" law of 3 January 1986, now codified in article L. 321-1 of the Environmental Code, simply defines the coastline as a geographical entity that calls for a specific policy of development, protection and enhancement, without specifying its extent.
[51] Article 1, para. 1 (4) of UNCLOS defines "pollution of the marine environment" as "the introduction by man, directly or indirectly, of substances or energy into the marine environment, *including estuaries*" (emphasis added).

at the mouth of a river, are indeed part of the "marine environment", unlike the mainland. It is in this sense that the Court of Justice of the European Union (hereinafter "CJEU") interpreted the term "*littoral*" used in article 220, paragraph 6, of the French version of UNCLOS. Comparing it to the term "*côtes*" used in the French version of the 1969 Convention Relating to Intervention on the High Seas, the CJEU held that "those two words designate, in accordance with their ordinary meaning in everyday language, the *area where the sea meets the land*", pointing out that "those two provisions have been drafted in the same way in the English-language version, the same word 'coastline', being used to designate that *area*."[52]

51. In concrete terms, the marine environment covered by the Convention is not only an area; it is also a reservoir of biodiversity. The fact that the definition of "pollution of the marine environment" in article 1, paragraph 1, subparagraph 4, of UNCLOS includes "harm to living resources and marine life" seems to bear out this interpretation, which is also confirmed by the *travaux préparatoires* of the Convention, to which reference may be made as an additional means of interpretation.[53] In the *Southern Bluefin Tuna* cases, the Tribunal itself considered that "the conservation of the living resources of the sea is an element in the protection and preservation of the marine environment"[54] and, in its opinion of 2 April 2015, that "living resources and marine life are part of the marine environment".[55] Furthermore, article 194, paragraph 5, of UNCLOS, which extends the scope of Part XII to "rare or fragile ecosystems" as well as "the habitat of depleted, threatened or endangered species and other forms of marine life", implies that the marine environment should not be understood as including only living resources but also the physical and geographical environment which enables them to exist. In other words, the protection regime enshrined in the Convention applies to the entirety of marine ecosystems, made up of both the biotope (physical environment with its own specific characteristics) and the biocenosis (i.e., living beings interacting with the biotope).

[52] CJEU, Judgment, 11 July 2018, *Bosphorus Queen Shipping Ltd Corp. v Rajavartiolaitos,* Case C-15/17, Report of Cases 2018, para. 73.
[53] See the rule of interpretation reflected in article 32 of the Vienna Convention on the Law of Treaties.
[54] ITLOS, Order on Provisional Measures, 27 August 1999, *Southern Bluefin Tuna Cases (New Zealand* v. *Japan; Australia* v. *Japan), ITLOS Reports 1999*, p. 295, para. 70.
[55] *ITLOS Reports 2015, op. cit.,* p. 61, para. 216.

52. This ecosystem concept of the "marine environment" also seems to result from the subsequent practice of the parties to the Convention, which must be taken into account alongside the context in order to interpret the terms.[56] In the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, adopted by the Assembly of the International Seabed Authority (which brings together all the States Parties to the Convention), the term "marine environment" is defined as including "the physical, chemical, geological and biological components, conditions and factors which interact and determine the productivity, state and quality of the marine ecosystem, the waters of the seas and oceans and the airspace above those waters, as well as the seabed and ocean floor and subsoil thereof".[57] This approach is likewise confirmed by a review of the work of the Seabed Committee, during which, as early as 1972, a broad definition of the marine environment was also proposed that included "the surface of the sea, the air space above, the water column and the sea-bed beyond the high tide mark including the biosystems therein or depending thereon."[58]

53. This ecosystem approach to the marine environment, which also highlights the unity of its legal status despite the diversity of its components, should therefore be taken into account by the Tribunal when identifying the specific obligations of States Parties to the Convention to prevent, reduce and control pollution of the marine environment and to protect and preserve the marine environment in relation to the effects of climate change.

IV.1. First subquestion: what are the specific obligations of States to prevent, reduce and control pollution of the marine environment in relation to the deleterious effects that result or are likely to result from climate change, including

[56] See the rule of interpretation reflected in article 31, para. 3 (b) of the Vienna Convention on the Law of Treaties.
[57] Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area, 22 July 2013 (ISBA/19/C/17), art. 1, para. 3(c).
[58] Seabed Committee, Malta: Draft articles on the preservation of the marine environment, UN Doc. A/AC.138/SC.III/L.33 (1972).

through ocean warming and sea level rise, and ocean acidification, which are caused by anthropogenic greenhouse gas emissions into the atmosphere?

(a) General architecture of the Convention with regard to preventing, combating and controlling pollution of the marine environment

54. Pollution of the marine environment is dealt with in UNCLOS first in article 1, paragraph 1, subparagraph 4, which defines *the use of terms and scope* of the Convention. It is the subject of several other subsequent provisions, most notably in Part XII of the Convention, which specify respectively the scope of the obligations to prevent, combat and control pollution, and the content and scope of those obligations. Under the *general provisions* (section 1 of Part XII), States Parties have, *inter alia*, the obligation to take the *measures necessary to prevent, combat and control pollution of the marine environment* (article 194), the *duty not to transfer damage or hazards or transform one type of pollution into another* (article 195) and the obligation to take measures to prevent, reduce and control pollution of the marine environment resulting from the *use of techniques or the introduction of alien or new species* (article 196). These provisions are themselves accompanied by specific obligations in terms of *cooperation* (section 2 – articles 197 to 201), *technical assistance* (section 3 – articles 202 and 203) and *monitoring and environmental assessment* (section 4 – articles 204 to 206). They are also supplemented by a set of obligations specific to different sources of pollution, listed in Section 5 of Part XII: article 207 (*Pollution from land-based sources*), article 208 (*Pollution from seabed activities subject to national jurisdiction*), article 209 (*Pollution from activities in the Area*), article 210 (*Pollution by dumping*), article 211 (*Pollution from vessels*) and article 212 (*Pollution from or through the atmosphere*). Outside Part XII, article 145 is also noteworthy, as it concerns the prevention, reduction and control of pollution resulting from activities in the Area.

55. Before specifying the relevance, content and scope of these various obligations in relation to the deleterious effects on the marine environment that result or are likely to result from climate change, within the limits of the question put to the Tribunal, France intends first to demonstrate that anthropogenic greenhouse gas (hereinafter "GHG") emissions into the atmosphere fall within the scope of the Convention, *id est*, the definition of pollution of the marine environment, as understood by the Convention.

(b) Anthropogenic GHG emissions constitute pollution of the marine environment within the meaning of the Convention

56. Article 1 of UNCLOS deals with the *use of terms* and the *scope* "for the purposes of this Convention". Paragraph 1, subparagraph 4, of this provision reads as follows:

> "Pollution of the marine environment" means introduction by man, directly or indirectly, of substances or energy into the marine environment, including estuaries, which results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities….

57. It follows from this provision that pollution of the marine environment is defined as a fact, whose existence is established when three categories of conditions are met, relating respectively to (i) the origin of the facts, (ii) the source of the pollution and (iii) the resulting harmful effects. France is of the opinion that anthropogenic GHG emissions meet the three categories of conditions. As a preliminary point, however, two sets of remarks on methodology should be made concerning respectively the method of interpretation of article 1, paragraph 1, subparagraph 4, and the need to use scientific data for demonstration purposes.

58. *Methodology for interpreting article 1, paragraph 1, subparagraph 4.* It should be noted that, in addition to article 1, paragraph 1, subparagraph 4, other provisions contribute to defining the scope *rationae materiae* and *rationae loci* of the obligations to prevent, combat and control pollution of the marine environment. Such provisions help to clarify and specify the concept of pollution of the marine environment, as set out in article 1 of the Convention. For example, article 194, paragraph 1, of the Convention, imposes a general obligation on States Parties to take measures to prevent, reduce and control pollution of the marine environment "from any source". Article 194, paragraph 3, confirms that the obligation concerns "all sources of pollution of the marine environment" and draws up a list of such sources, which is not exhaustive, as it is preceded by the adverb "*inter alia*". The enumeration covers specifically measures to deal with "the release of toxic, harmful or noxious substances, especially those which are persistent, from land-based sources, from or through the atmosphere". These two

categories of sources are themselves the subject of rules developed later in the Convention. Article 207 sets out the obligations of States to "prevent, reduce and control pollution of the marine environment from land-based sources". Article 212 sets out the obligations of States "to prevent, reduce or control pollution of the marine environment from or through the atmosphere". This provision is itself supplemented by article 222, which deals specifically with "[e]nforcement with respect to pollution from or through the atmosphere". Finally, it should be remembered that under the general provisions, article 192 of the Convention, while not explicitly stating the scope of the obligations to prevent, combat and control pollution, nonetheless imposes a general obligation to protect and preserve the marine environment.[59]

59. France submits that it follows from this provision that article 1, paragraph 1, subparagraph 4, must not be read and interpreted in isolation, lest the other relevant provisions, in particular those mentioned above, be deprived of *effet utile*. According to well-established case law, a treaty "forms a complete whole, the different provisions of which cannot be dissociated from the others and considered apart by themselves."[60] The interpretation of article 1, paragraph 1, subparagraph 4, must therefore be consistent with those provisions and in light of the context composed, in particular, of article 194, paragraphs 1 and 3, and articles 207, 212 and 222 of the Convention, to which article 192 should also be added.

60. *Use of scientific data*. The analysis of the three categories of conditions to show that anthropogenic GHG emissions contribute to pollution of the marine environment within the meaning of UNCLOS requires the use of science, in particular to show that these emissions are a source of pollution, which itself produces deleterious effects on the marine environment. Scientific data on the effects of climate change on oceans have regularly been summarized and updated on a global scale by the Intergovernmental Panel on Climate Change (IPCC) since 1990. Other international assessment mechanisms may also prove relevant, such as the United Nations Regular Process for Global Reporting and Assessment of the State of the Marine Environment. To date, this

[59] With regard to the interpretation of article 192 of the Convention, see paras.140-147 of the present written statement.
[60] PCIJ, Series A/B, No. 70, *op. cit.*, p. 21.

process has issued two reports[61] which describe changes in the state of the marine environment as a result of the pressures upon it. With specific regard to the effects of climate change, however, it should be noted that both reports explicitly draw on the knowledge summarized by the IPCC, without adding any new data.[62]

61. Although they have no legal value, the IPCC reports – as a summary of existing knowledge – reflect the global consensus of the scientific community on climate change. It should also be noted that the reports are each accompanied by a "summary for decision makers" which, for their part, have particular authority because they have been jointly approved by scientists and government representatives. It should also be noted that international organizations and governments explicitly refer to the IPCC reports to support or base the political and legal actions and measures they adopt to address climate change, as well as to conduct negotiations aimed at reducing GHG emissions. One example is the resolution on oceans and the law of the sea adopted in 2022 by the United Nations General Assembly, paragraph 213 of which reads as follows:

> *Also notes with concern* the findings of the Intergovernmental Panel on Climate Change in its successive reports, and in this regard refers in particular to its special report entitled *The Ocean and Cryosphere in a Changing Climate*, as well as the summary for policymakers, which was accepted by the Intergovernmental Panel on Climate Change at its fifty-first session on 23 September 2019, the 2022 report of Working Group II on climate change impacts, adaptation and vulnerability, which was accepted by the Intergovernmental Panel at its fifty-fifth session on 27 February 2022 and the 2022 report of Working Group III on mitigation of climate change, which was accepted by the Intergovernmental Panel at its fifty-sixth session on 4 April 2022….[63]

In the same vein, point 5 of the Lisbon Declaration "Our Ocean, Our Future, Our Responsibility", adopted in June 2022 at the end of the Second United Nations Ocean Conference, refers to the adverse effects of climate change on the oceans

[61] *First World Ocean Assessment*, United Nations publications, New York, 2016, 1752 p.; UN, *Second World Ocean Assessment*, 2021, vol I, 550 p. and Vol II, 520 p.
[62] *First World Ocean Assessment, op. cit.*, p. 31; *Second World Ocean Assessment, op. cit.*, vol I, 550 p. and Vol II, *op. cit.*, pp. 8 and 57.
[63] A/RES/77/248 of 30 December 2022.

as highlighted by the Intergovernmental Panel on Climate Change (IPCC) in its special report entitled *The Ocean and Cryosphere in the Context of Climate Change* and its subsequent reports.[64]

62. France therefore believes that the Tribunal should draw on these reports, in particular the IPCC special report *The Ocean and Cryosphere in the Context of Climate Change*,[65] whose findings have been refined and updated in subsequent assessment reports.

63. In light of these preliminary remarks, it is now necessary to verify that anthropogenic GHG emissions fall within the definition of pollution of the marine environment as given in the Convention, i.e., that they meet the three categories of conditions laid down in article 1, paragraph 1, subparagraph 4, relating respectively to (i) the origin of the facts, (ii) the source of pollution and (iii) the resulting harmful effects.

(i) Anthropogenic source of greenhouse gases

64. Only pollution resulting from human activity falls within the definition set out in article 1, paragraph 1, subparagraph 4, of the Convention. This criterion does not pose any difficulty here, since the present request for an opinion explicitly concerns "anthropogenic" greenhouse gas emissions into the atmosphere. The first condition for such emissions to fall within the definition of marine pollution for the purposes of the Convention is therefore met.

(ii) GHG as a source of pollution within the meaning of the Convention

65. Article 1, paragraph 1, subparagraph 4, of UNCLOS states that pollution consists of "the introduction […], directly or indirectly" into the marine environment of "substances or energy". In this sense, it deals with the question of the source of pollution. According to one of the ordinary meanings of the term, introduction is the action of bringing (one thing into another).[66] The term therefore refers to a process

[64] A/CONF.230/2022/1.
[65] IPCC, *The Ocean and Cryosphere in the Context of Climate Change - Summary for Policymakers*, 2019.
[66] *Dictionnaire de la langue française*, Le Robert, 2022 [for the definition in French].

whose purpose or effect is to incorporate into the marine environment an element (substance or energy) that is not found there. It should be noted that the definition takes a broad view of the concept of "introduction" with respect to its manner, i.e., "directly or indirectly". It does, however, specify the nature of the pollutant, which must consist of a "substance" or an "energy". This process, described in abstract and general terms, is clarified and specified by the above-mentioned provisions of the Convention, with which article 1, paragraph 1, subparagraph 4, must be read in conjunction.

66. "*Introduction […], indirectly or directly*". The concept takes on a practical meaning in light of article 194 of the Convention, which requires States to take all measures necessary to prevent, combat and control pollution of the marine environment. Article 194, paragraph 3, specifies the purpose of these measures and, by that means, the various sources of pollution of the marine environment: "land-based sources, from or through the atmosphere or by dumping" (article 194, paragraph 3, subparagraph a), "pollution from vessels" (article 194, paragraph 3, subparagraph b), "pollution from installations or devices used in exploration or exploitation of the natural resources of the seabed and subsoil" (article 194, paragraph 3, subparagraph c) and "pollution from other installations or devices operating in the marine environment" (article 194, paragraph 3, subparagraph d). Pollution by dumping, by vessels or resulting from installations or devices operating in the marine environment is attendant on the introduction into the sea itself of substances or energy and therefore corresponds to the hypothesis of an "introduction" carried out "directly": the location of the source is the sea. On the other hand, the location of the other sources of pollution explicitly referred to in article 194, paragraph 3, namely, "land-based sources, from or through the atmosphere", is not the sea. This pollution, because it occurs in another space, on land or in the air, represents instances of "introduction", carried out "indirectly", of substances or energy into the marine environment, suggested first by article 194, paragraph 3, subparagraph a, which refers to pollution "*from* land-based sources, from or through the atmosphere" (emphasis added), and also by the headings of articles 207 and 212, which refer respectively to "pollution *from* land-based sources" and "pollution *from* or through the atmosphere" (emphasis added). Such sources of pollution are nonetheless fully relevant to the general objective to protect and preserve the marine environment (article 192), because of and within the limits of the interactions between

the land and air environments on the one hand, and the marine environment on the other.

67. With regard to GHG emissions, it should be noted that neither article 194 nor the provisions of section 5 of Part XII of the Convention explicitly mention such a source. That there is no such mention is not surprising, since the Convention was negotiated and concluded at a time when the effects of climate change caused by such emissions, although known to science, were not as widespread or as serious as they are today. France considers that the Convention applies to GHG emissions despite the absence of any explicit reference to them therein.

68. Given the wide range of physical sources of atmospheric GHG emissions (human activities, regardless of the environment in which they occur), the provisions concerning land-based pollution on the one hand and atmospheric pollution on the other appear to be the most relevant in the present case.

69. Article 207 applies to "pollution from land-based sources". It does not define the concept but suggests a broad understanding of it by not limiting it to pollution from "direct" land-based sources and by specifying that it applies to pollution "including from rivers, estuaries, pipelines and outfall structures…" (article 207, paragraph 1). It should also be noted that the concept of land-based pollution is defined in the Convention for the Prevention of Marine Pollution from Land-Based Sources, as amended in 1986, as covering in particular pollution of the sea "and emissions into the atmosphere", which may be from "land-based sources".[67] Of equal note is that the Montreal Guidelines for the Protection of the Marine Environment from Land-Based Sources of Pollution, adopted by the United Nations Environment Programme in 1985, define "land-based sources" as "municipal, industrial or agricultural sources, both fixed and mobile, on land, discharges from which reach the marine environment, in particular: […] via the atmosphere".[68] Although not a binding source of law in themselves, these guidelines, which "have been prepared on the basis of common elements and principles drawn up from existing relevant agreements, drawing upon

[67] Article 3, subparagraph c, of the Convention for the Prevention of Marine Pollution from Land-Based Sources, concluded in Paris on 4 June 1974, amended on 26 March 1986 (*UNTS*, vol. 1557, p. 497).
[68] Decision 13/18 of the Governing Council of UNEP, section II, 24 May 1985, p. 3.

experience already gained through their preparation and implementation,"[69] can reasonably be seen as expressing a consensual interpretation of the concept of pollution of the marine environment from land-based sources. As such, they constitute an element to which regard should be had for interpreting the concept of pollution from land-based sources as it is understood in UNCLOS. On the basis of such an interpretation, it would follow that article 207 of UNCLOS should apply to anthropogenic GHG emissions produced by land-based activities.

70. With regard to pollution from or through the atmosphere, the scope of States' obligations, as set out in article 212, paragraph 1, reads as follows:

> States shall adopt laws and regulations to prevent, reduce or control pollution of the marine environment from or through the atmosphere, applicable to the air space under their sovereignty and to vessels flying their flag or vessels or aircraft of their registry ....

It should be noted that article 222, paragraph 1, reproduces a similar wording with regard to the application of these measures. It provides that States shall enforce their laws and regulations adopted in accordance with article 212, paragraph 1, "[w]ithin the air space under their sovereignty or with regard to vessels flying their flag or vessels or aircraft of their registry".

71. It follows from these two provisions that pollution from or through the atmosphere within the scope of the Convention covers, for each State, activities affecting the airspace under its sovereignty, the latter including the space above the land territory and the territorial sea, in accordance with article 2, paragraph 2, of the Convention. In this respect, articles 212 and 222 are likely to encompass pollution from land-based sources insofar as activities on the ground would be considered capable of affecting airspace and constituting pollution from the atmosphere within the meaning of those provisions. The International Law Commission appears to have adopted this interpretation in its recent work on the protection of the atmosphere.[70] Articles 212 and

[69] *Ibid.*, p. 1.

[70] See para. 9 of the commentary of Guideline No. 9 of the draft guidelines adopted by the ILC in 2021 on the protection of the atmosphere, A/76/10, pp. 42 (footnotes omitted): "This link [between protection of the atmosphere and the oceans] is also borne out by the United Nations Convention on the Law of the Sea, which defines the 'pollution of the marine environment', in article 1, paragraph 1(4), in such as a way as to include all sources of marine pollution *from land-based sources* and vessels." [Emphasis added].

222 also concern atmospheric pollution by vessels or aircraft to which the State has granted its flag or registration, wherever they may be. With regard, moreover, to the express reference to pollution "through the atmosphere", it should be noted that in a judgment of 21 December 2011, the CJEU held that "the fact that, in the context of applying European Union environmental legislation, certain matters contributing to the pollution of the air, sea or land territory of the Member States originate in an event which occurs partly outside that territory is not such as to call into question, in the light of the principles of customary international law capable of being relied upon in the main proceedings, the full applicability of European Union law in that territory …."[71]

72. *Introduction of "substances or energy"*. Pollution falls within the definition given in article 1, paragraph 1, subparagraph 4, of UNCLOS only if the element introduced into the marine environment consists of a substance or energy. In this respect, it should be recalled that the ocean interacts with the atmosphere, with which it exchanges gases in particular. The ocean is thus the planet's main natural carbon sink and, as such, absorbs GHGs.[72] Anthropogenic greenhouse gas emissions, whether they are caused by land or air activities under the territorial jurisdiction of the State, or by activities under the jurisdiction of the State by virtue of the law of the flag where they occur, can therefore be considered an indirect introduction of "substances" in a gaseous state into the marine environment, within the meaning of article 1, paragraph 1, subparagraph 4, of the Convention.

73. The concept of "substances" in the definition of pollution of the marine environment is, for that matter, given a potentially extensive meaning. International case law has had occasion to assess *in concreto* various factual situations. The discharge of radioactive substances (plutonium) produced by the activities of a plant located on the coastline of a coastal State was the reason for the prescription of provisional

[71] CJEU, Judgment of the Court (Grand Chamber), 21 December 2011, *Air Transport Association of America and Others v Secretary of State for Energy and Climate Change*, Case C-366/10, para. 129.
[72] IPCC, 2021: Summary for Policymakers. In: Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Masson-Delmotte, SEE, P. Zhai, A. Pirani, S.L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M.I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T.K. Maycock, T. Waterfield, O. Yelekçi, R. Yu, and B. Zhou (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, United States of America, p. 19.

measures by the Tribunal in the *Mox* case.[73] In the *South China Sea* case, the arbitral tribunal adopted a broad interpretation of the concept of "introduction of substances". It considered that the use of dynamite and cyanide in fishing came under this description within the meaning of the Convention.[74] With regard to dynamite, however, it was not the introduction per se of the substance that produced deleterious effects but rather its use (as a fishing technique) and which proved decisive. The shockwave produced by the explosion of the dynamite in the water had devastating effects on the surrounding ecosystems, in particular the corals. The same tribunal also concluded that the dredging work undertaken for the reclamation of marine areas was conducted "in such a way" as to pollute the marine environment within the meaning of the Convention. Although the activity did not constitute the introduction of a substance and article 194, paragraph 5 (use of a technique), was not mentioned, the tribunal nevertheless considered that such activity could constitute pollution within the meaning of the Convention because of its deleterious effects (turbidity of the water).[75] With regard to both dynamite and dredging, the tribunal therefore departed from the concept of "introduction of substances" in the strict sense of the term, and focused instead on the deleterious effects produced respectively by the use of a substance (not by the substance itself) and by the use of a technique (dredging).

74. If, however, the Tribunal were not convinced by this demonstration, France is of the opinion that an evolutive interpretation of the Convention – in light of developments in international law and specifically in international law on climate change – would lead to the same conclusion.

75. Adopting an inclusive definition of the sources of pollution of the marine environment is well in line with the changing ways the marine environment is being polluted today and the alarming burden they place on the marine environment, attested by the latest report of the UN Regular Process for Global Reporting and Assessment of the State of the Marine Environment.[76] The multiplicity of sources of marine pollution is now a major concern for the international community, as shown in particular by the

[73] ITLOS, Order for Provisional Measures, 3 December 2001, *Case concerning the MOX Plant (Ireland* v. *United Kingdom), ITLOS Reports 2001*, p. 95.
[74] See PCA, Award of 12 July 2016, *op. cit.* para. 970.
[75] *Ibid.*, para. 983.
[76] *Second World Ocean Assessment*, Vol. I, 550 p. and Vol. II, 520 p.

annual resolutions of the UN General Assembly concerning oceans and the law of the sea[77] as well as the aforementioned Lisbon Declaration adopted at the end of the United Nations Ocean Conference.[78]

76. Such a context warrants an evolutive interpretation of the Convention, along the lines of that produced by the Appellate Body of the World Trade Organization (hereinafter "WTO") in the *Shrimp* case regarding the concept of "exhaustible natural resources" in article XX, subparagraph b, of the GATT. The Appellate Body stated: "The words […] 'exhaustible natural resources', were actually crafted more than 50 years ago. They must be read by a treaty interpreter in the light of contemporary concerns of the community of nations about the protection and conservation of the environment."[79] In the same vein, the International Court of Justice has accepted the principle of an evolutive interpretation of the terms of a treaty to take account of developments in international law. Provided that such was the intention of the parties at the time the treaty was concluded (an intention which the Court may presume), it is possible that "account should be taken of the meaning acquired by the terms in question upon each occasion on which the treaty is to be applied."[80] Given the nature of the Montego Bay Convention, a text laying down a general framework that is set to last, as suggested by the designation "Constitution for the Oceans", which has been widely and long used since it was formulated by the President of the Third Conference,[81] it is reasonable to argue that it was the intention of the parties "to give the terms used – or some of them – a meaning or content capable of evolving, not one fixed once and for all".[82]

77. Additionally, three categories of remarks can be made. First, as mentioned above, article 194 explicitly covers all sources of pollution. On three occasions, article 194 refers to this all-encompassing and comprehensive approach and this repetition makes sense: "from any source" (article 194, paragraph 1), "all sources", "*inter alia*"

[77] See, for example, A/RES/77/248 of 30 December 2022, in particular para. 229 *et s.*
[78] See, in particular, paragraphs 4, 8 and 13 (subparagraphs d and e) of the Declaration.
[79] WTO, *United States – Import Prohibition of Certain Shrimp and Shrimp Products*, Appellate Body Report, 12 October 1998, WT/DS58/AB/R, para. 129.
[80] ICJ, Judgment, 13 July 2009, *Dispute regarding Navigational and Related Rights (Costa Rica* v. *Nicaragua) I.C.J. Reports 2009*, p. 33, para. 64.
[81] Tommy T.B. Koh, President of the Third United Nations Conference on the Law of the Sea. Available at the following link: https://www.un.org/depts/los/convention_agreements/texts/koh_english.pdf
[82] *Ibid*.

those enumerated in article 194, paragraph 3 – the terms used are unequivocal. To exclude the possibility of GHG emissions falling under the scope of sources of pollution of the marine environment within the meaning of the Convention, when they – along with overfishing – constitute the main threat to the oceans, would not be consonant with either the interpretation or the letter of the text. The requirement that the Convention be interpreted consistently also bears out the conclusion that GHG emissions are a source of pollution of the marine environment within the meaning of the Convention. Article 192 sets out the objective relating to the protection and preservation of the marine environment and, on account of its position at the head of Part XII in the list of general provisions, informs the meaning of the other provisions which complement and elaborate on it. This endorses a broad interpretation of the concept of source of pollution. If an exclusive interpretation were to prevail, the object of the general obligation laid down in article 192 would be reduced and such an interpretation would jeopardize the achievement of the object and purpose of article 192 despite the case law that has recalled the binding nature of this provision for States.[83]

78. To conclude this point, France considers that GHG emissions are a source of pollution of the marine environment within the meaning of the Convention.

(iii) GHG emissions causing "deleterious effects" on the marine environment

79. According to article 1, paragraph 1, subparagraph 4, of UNCLOS, pollution of the marine environment means that it

> results or is likely to result in such deleterious effects as harm to living resources and marine life, hazards to human health, hindrance to marine activities, including fishing and other legitimate uses of the sea, impairment of quality for use of sea water and reduction of amenities….

80. As a preliminary point, it should be noted that the understanding of "deleterious effects" is taken broadly in this context. This is illustrated by the phrase "results or is

[83] In particular: ITLOS, Order on Provisional Measures, 23 December 2010, *M/V "Louisa" Case (Saint Vincent and the Grenadines* v. *Spain)*, *ITLOS Reports 2008-2010*, paras. 76-77; see also PCA, Award of 12 July 2016, *op. cit.*, para. 941.

likely to result", which indicates that both current and/or certain effects ("results") and potential effects ("likely to result") are taken into account. This is also reflected in the understanding of the concept of "deleterious effects" itself, which is not defined abstractly but by reference to a list, covering a wide spectrum. The list includes a very diverse range of situations, using the concepts of "harm", "hazard", "hindrance", "impairment" or "reduction" and including not only the deleterious effects on the marine environment itself and on the living resources it contains, but also the deleterious effects on humans, measured in terms of health hazards or disruption of human activities at sea. In addition, the use of the words "such as" suggests that the list is not exhaustive.

81. *Wording and object of the question put to the Tribunal.* On the basis of the wording of article 1, paragraph 1, subparagraph 4, of the Convention, the request for an opinion referred to the Tribunal concerns

> the deleterious effects that result or are likely to result from climate change, including through ocean warming and sea level rise, and ocean acidification, which are caused by anthropogenic greenhouse gas emissions into the atmosphere[.]

The request therefore calls for consideration to be given mainly, but not exclusively, to three categories of effects linked respectively to ocean warming, sea level rise and ocean acidification. The wording used presupposes that these three categories of effects are connected to climate change as being the consequences thereof. On this point, France wishes to offer the following clarifications.

82. First, it should be noted that the concepts of "climate" and "climate change" are defined by scientists as follows:

> Climate: Climate in a narrow sense is usually defined as the average weather, or more rigorously, as the statistical description in terms of the *mean and variability of relevant quantities* over a period of time ranging from months to thousands or millions of years. The classical period for averaging these variables is 30 years, as defined by the World Meteorological Organization. The relevant quantities are most often surface variables such as *temperature, precipitation and wind*. Climate in a wider sense is the state, including a statistical description. [Emphasis added].

> Climate change: Climate change refers to a change in the state of the climate that can be identified … by *changes in the mean and/or the variability of its properties* and that persists for an extended period, typically decades or longer.[84] [Emphasis added].

It can then be observed that there is no doubt that the warming of the oceans on the one hand, and the rise in sea level as a result of the melting of the cryosphere on the other, are two consequences of atmospheric warming. In this sense, both are certainly effects of climate change, as defined above. However, the question remains whether this is also true as regards acidification of the sea.

83. Ocean acidification is defined by scientists as

> a reduction in the pH of the ocean over an extended period, typically decades or longer, which is caused primarily by uptake of carbon dioxide (CO2) from the atmosphere, but can also be caused by other chemical additions or subtractions from the ocean.[85]

Understood in this way, acidification is a process resulting primarily from the increase in the concentration of carbon dioxide (CO2) in the sea. Its source is anthropogenic when the increase in this concentration in the ocean is the result of human activities. It therefore appears that acidification is not a consequence of climate change since the latter is defined as a change in the mean and/or the variability of variables such as temperature, rainfall and wind. Moreover, several legal texts refer to climate change and acidification as distinct processes, thereby seeming to corroborate such an interpretation.

84. One example of note is the "Global Biodiversity Framework from Kunming to Montreal", adopted by the Conference of the Parties (hereinafter "COP") to the Convention on Biological Diversity (hereinafter "CBD") in December 2022, which refers to "the impact of climate change and ocean acidification on biodiversity".[86] Another example is the BBNJ Agreement, which mentions

[84] IPCC, 2013: Glossary [Planton, S. (coord.)]. Cimate Change 2013: The Physical Science Basis. The Working Group I contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (dir. publ.)], Cambridge University Press, pp. 188 and 187, respectively.
[85] IPCC, Glossary, *op. cit.*, p. 186.
[86] Target 8, CBD/COP/15/L.25, 18 December 2022.

> climate change impacts on marine ecosystems, *such as* warming and ocean deoxygenation, *as well as* ocean (preambular paragraph 3) (emphasis added);
>
> the consequences of climate change, ocean acidification and related impacts (article 1§8);
>
> adverse effects of climate change *and* ocean acidification (article 5, subparagraph g) (emphasis added);
>
> resilience to stressors, including those related to climate change, ocean acidification (article 14, subparagraph c); and
>
> [v]ulnerability, including to climate change *and* ocean acidification (Annex I, subparagraph f) (emphasis added).

Similarly, the UN General Assembly's annual resolutions on oceans, the law of the sea and sustainable fisheries suggest distinct processes when they refer to "the effects of acidification *and* climate change". [Emphasis added].[87]

85. It should also be noted however that other texts of universal scope do not demonstrate the same rigour. This is particularly true of the Lisbon Declaration, which refers to the "adverse effects of climate change [...] including [...] ocean acidification".[88] The IPCC, for its part, takes account of and evaluates the effects of acidification *when* it assesses climate change, *in the same way and at the same time* as the effects linked to this change, so that it is not truly or always possible to discern the effects linked to acidification from the effects linked to other causes. It should also be added that acidification, while not a consequence of climate change, is nonetheless a consequence of the increased concentration of CO2, which is one of the gases responsible for the greenhouse effect. As a result, the acidification of the oceans, although not the result of climate change, is nevertheless always associated with it. It should likewise be noted that the request submitted to the Tribunal relates to "*the deleterious effects* that result or are likely to result from climate change, including through ocean warming and sea level rise, and ocean acidification, *which are caused by anthropogenic greenhouse gas emissions into the atmosphere*." [Emphasis added]. The wording used shows that the requesting organization expects the Tribunal to make

[87] See, in particular, A/RES/77/248 of 30 December 2022, para. 214; A/RES/77/118, 9 December 2022, para. 11.
[88] "Our Ocean, Our Future, Our Responsibility", declaration adopted at the close of the Ocean Conference of 2022, A/CONF.230/2022/1, para. 5.

a ruling on the deleterious effects of ocean acidification, even though it may not be a consequence *stricto sensu* of climate change.

86. *Existence of a global consensus that GHG emissions generally result or are likely to result in deleterious effects on the marine environment*. Whether they are described as "negative", "adverse" or "deleterious", the effects of GHG emissions on the marine environment are a matter of concern that is regularly expressed worldwide. This can be seen from the practice of States since the adoption of the UNFCCC (1992).

87. Such practice can be seen first and foremost in the gradual development of treaty law on climate change. While the 1992 Framework Convention refers to the adverse effects of climate change in general (preambular paragraph 1) and "the adverse effects of sea-level rise on islands and coastal areas" (preambular paragraph 12), the Paris Agreement recognizes the risk of damage to the marine environment. Its preamble mentions the importance of "ensuring the integrity of all ecosystems, including oceans".[89] This recognition is also evidenced in the development of the law of the sea, represented by the adoption of the BBNJ Agreement (Draft agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction), which mentions on four occasions the deleterious effects or impacts of climate change and acidification on the state of biodiversity and marine ecosystems (preambular paragraph 3; article 5, subparagraph g; article 14, subparagraph c; Annex I, subparagraph f). As an implementing agreement of the 1982 Convention ("under the UNCLOS"), the text encourages the evolutive interpretation thereof and testifies, at the very least, to the universal consensus that climate change and sea acidification have deleterious effects on the marine environment (in this instance on the state of biological diversity and marine ecosystems).

88. In addition to this treaty practice, a large number of declarations have been adopted, by consensus, in particular in the form of UN General Assembly resolutions. Although these declarations are not binding as such, they nonetheless have normative

[89] Preambular paragraph 13, United Nations, *Treaty Series*, vol. 3156, C.N.92.2016. TREATIES-XXVII.7.d of 17 March 2016.

value and can therefore produce legal effects, as the International Court of Justice has on many occasions reiterated.[90] Specific note should be taken of the annual resolutions on oceans, the law of the sea and sustainable fisheries, which have reflected every year since 2006[91] the international community's concern about the consequences of climate change on seas and oceans. The latest resolutions (2022) mention respectively, and in particular,

> the current and projected adverse effects of climate change, including rising seawater temperature, ocean deoxygenation, and sea level rise, as well as ocean acidification, on the marine environment and marine biodiversity;
>
> climate change continues to increase the severity and incidence of coral bleaching throughout tropical seas and weakens the ability of reefs to withstand ocean acidification, which could have serious and irreversible negative effects on marine organisms, particularly corals, as well as to withstand other pressures, including overfishing and pollution;[92]
>
> the impacts of global climate change and ocean acidification on coral reefs and other ecosystems relevant to fisheries; as well as the need for
>
> improv[ing] understanding of the impacts of acidification and climate change on oceans and seas.[93]

89. It should also be noted that, outside the context of the UN General Assembly, the States meeting at the United Nations Ocean Conference in June 2022 adopted the above-mentioned Lisbon Declaration, point 5 of which refers to the "adverse effects [of climate change] on the ocean and marine life".[94]

90. Lastly, it can be likewise be noted that the Kunming-Montreal Global Biodiversity Framework defines the objective of "minimi[zing] the impact of climate change and ocean acidification on biodiversity" as one of the "targets" to be achieved in order to reduce the threats to biodiversity.[95]

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[90] *I.C.J. Reports 1996 (I), op. cit.*, p. 254-255, para. 70; ICJ, Advisory Opinion, 25 February 2019, *Legal effects of the separation of the Chagos Archipelago from Mauritius in 1965, I.C.J. Reports 2019*, p. 132-133, para. 152-155.
[91] A/RES/61/222, para. 111.
[92] A/RES/77/248, 30 December 2022, Oceans and the law of the sea, preamble.
[93] A/RES/77/118, 9 December 2022, UN General Assembly sustainable fisheries, para. 11 and para. 214.
[94] A/CONF.230/2022/1, *Op. cit.*
[95] Target 8, CBD/COP/15/L.25, 18 December 2022.

91. This abundant and consistent practice unambiguously bears witness to a global consensus that climate change and ocean acidification, resulting from GHG emissions, produce deleterious effects on the marine environment. The nature and scope thereof should be clarified in light of the scientific knowledge available on the subject.

92. France will base its position primarily on the IPCC's 2019 special report, on the understanding that subsequent reports have confirmed the extent and seriousness of the findings established in 2019. Two categories of remarks must be made at the outset. First, it should be pointed out that the IPCC classifies data on such effects into two categories: observed impacts and projections for the future. They are all classified according to the degree of confidence accorded to them by scientists. Five degrees of confidence are used: very low, low, medium, high and very high. Insofar as the request for an opinion concerns the effects "that result or are likely to result" from climate change, all the effects listed are relevant. Second, the IPCC report does not make a distinction between the impacts by the type of pollution resulting from GHG emissions (warming, acidification, sea level rise or other) but by the target concerned (physical parameters, ecosystems, human populations and ecosystem services). It is therefore not truly or always possible to distinguish, for each target in the report, the effects arising from one or other form of pollution resulting from GHG emissions.

93. Many of the effects identified by the IPCC are likely to be deleterious for the marine environment within the meaning of article 1, paragraph 1, subparagraph 4, of the Convention, such as harm to living resources and marine life. Grouped together in the IPCC report under the heading "Observed Impacts on Ecosystems", the harm or risk of direct or indirect harm to living resources and marine life is described as massive and widespread, affecting all the oceans, although specific characteristics of certain regions or ecosystems are highlighted (especially polar regions).[96]

94. The harm and threats to the ecosystems identified represent direct or indirect harm and threats to "natural resources and marine life" and clearly constitute "deleterious effects" within the meaning of article 1, paragraph 1, subparagraph 4, of

[96] IPCC, Special Report on the Ocean and Cryosphere in a Changing Climate, *op. cit.*, pp. 10-12 for the observed impacts and pp. 20-23 for the projected risks.

the Convention. It will be recalled that the arbitral tribunal in the *South China Sea* case, after defining the concept of ecosystem, took into account the harm caused to ecosystems by dredging and fishing activities carried out under China's jurisdiction in order, naturally, to apply article 194, paragraph 5, of the Convention.[97] It should also be recalled that the Court of Justice of the European Union, this time for the purposes of applying article 220, paragraph 6, of the Convention (enforcement by coastal States to combat pollution from vessels), adopted a particularly comprehensive approach to the concept of harm to marine resources, favouring an ecosystem analysis.[98] Generally speaking, it is now universally accepted that harm to ecosystems constitutes, or is likely to constitute, harm to biodiversity and therefore to "living resources and marine life" within the meaning of article 1, paragraph 1, subparagraph 4, of the Convention. The BBNJ Agreement is based on this approach. Its purpose is the conservation and sustainable use of the marine biological diversity of areas beyond national jurisdiction and, through the creation of "area-based management tools",[99] it aims in particular "to protect, preserve, restore and maintain biodiversity and ecosystems."[100]

95. In conclusion, and for all the reasons given above, France is of the opinion that anthropogenic GHG emissions fall under the definition of pollution of the marine environment within the meaning of the United Nations Convention on the Law of the Sea.

(c) Relevance, content and scope of obligations to prevent, combat and control pollution caused by GHG emissions

96. France considers that States Parties to UNCLOS do have "specific obligations" "to prevent, reduce and control pollution of the marine environment in relation to the deleterious effects that result or are likely to result from climate change, including through ocean warming and sea level rise, and ocean acidification, which are caused by anthropogenic greenhouse gas emissions into the atmosphere". The first question put

[97] See PCA, Award of 12 July 2016, *op. cit.*, para. 945.
[98] CJEU, Report of Cases 2018, *op. cit.*, paras. 81-84.
[99] BBNJ Agreement, article 14, subparagraph a.
[100] BBNJ Agreement, article 14, subparagraph c.

to the Tribunal seeks to identify those very obligations and to define their content and scope. To that end, France considers it necessary to make the following remarks.

Preliminary remarks

97. *Principle of mutual supportiveness between the Convention and other relevant rules of international law*. As a preliminary point, France wishes to recall that in order to answer the first part of the question put to the Tribunal, in view of the need for consistency and mutual supportiveness between applicable rules formulated in UNCLOS,[101] it is important not to read all the obligations set out in the Convention in isolation but to the extent that they are informed by external rules, as long as they are "not incompatible with the Convention."[102] In addition, it should be noted that the Convention makes numerous references to external rules, understood in the broad sense, whether they be – to remain within Part XII – "internationally agreed rules, standards, and recommended practices and procedures" (articles 207, 208, 210, 212), "international rules, regulations and procedures" (articles 209, 215), "generally accepted international rules and standards established through the competent international organization or general diplomatic conference" (articles 211, 213, 214, 217, 218), "international rules and standards" (articles 219, 220, 222, 226, 228, 230), "generally accepted international rules and standards" (articles 211, 226) or "generally accepted" or "international rules and standards", or "recommended practices and procedures" (article 201). These international rules, standards, practices and procedures vary in scope depending on the provision. The scope of external rules is accordingly more limited in articles 207 and 212 (requiring them to be taken "into account") than in articles 210 and 211 (specifying that national laws and regulations "shall be no less effective" than global rules and standards).

98. *Most relevant external rules and the requirement to comply with them "in a manner consistent with the general principles and objectives of the Convention"*. As regards the answer to the first question put to the Tribunal, in addition to certain customary obligations relating to prevention and due diligence, the 1992 UNFCCC and

[101] See paras. 38-39 of the present written statement.
[102] Article 293, para. 1, mentioned above, and article 237, para. 2 of the Convention. See *ITLOS Reports 2015*, *op. cit.*, p. 27, paras. 80-84.

the 2015 Paris Agreement, as well as the regulations adopted within the framework of the International Maritime Organization (hereinafter "IMO") and the International Civil Aviation Organization (hereinafter "ICAO"), which cover greenhouse gas emissions resulting from international maritime and air transport, appear to be the most directly relevant.[103] Under article 237, paragraph 2, of UNCLOS, States Parties must carry out their specific obligations under other international conventions "in a manner consistent *with the general principles and objectives of th[e] Convention*". The general principles and objectives of the Convention by definition include those of Part XII of the Convention, and especially the "general obligation" "to protect and preserve the marine environment" under article 192. This means that States must fulfil their obligations under the Paris Agreement in a way that is "consistent" with their obligation to "protect and preserve the marine environment". Conversely, when they endeavour to "protect and preserve the marine environment" in accordance with the Convention, they are contributing to the objectives of international climate law by protecting and preserving the main greenhouse gas sink. As recalled above,[104] the preamble to the Paris Agreement states that it is "important to ensure the integrity of all ecosystems, *including the oceans* (…)." [Emphasis added].

The "chapeau" obligation set out in article 194 of the Convention

99. *Central role of article 194 in the obligation to take measures necessary to prevent, reduce and control pollution.* With regard to the prevention, reduction and control of pollution of the marine environment, article 194 of UNCLOS lays down a "chapeau" obligation, the scope of which is extremely broad. As was mentioned above,[105] article 194 covers "all measures […] necessary", "from any source". It also covers all maritime areas, regardless of whether they are under the sovereignty of a State,[106] and concerns the entire marine environment, and therefore *a fortiori* "rare or fragile ecosystems, as well as the habitat of depleted, threatened or endangered species" (article 194, paragraph 5), which, like coral reefs, are highly vulnerable to climate

[103] See para. 38 of the present written statement. See also PCA, Award of 12 July 2016, *op. cit.*, paras. 956, 959, 964, 970 and 983.
[104] See para. 87 of the present written statement.
[105] See paras. 66, 67, 77 of the present written statement.
[106] PCA, Award on Jurisdiction and Admissibility (Republic of the Philippines/People's Republic of China) of 29 October 2015, para. 408.

change.[107] The fact that paragraph 5 refers to the entirety of Part XII confirms the general nature of this provision. The general obligation laid down in article 194 is later detailed in various provisions of Part XII. Articles 195, 196, 207, 211, 212, 213 and 222 are particularly relevant to pollution caused by anthropogenic greenhouse gas emissions into the atmosphere.

100. *Obligation to take all measures necessary to prevent, reduce and control pollution caused by greenhouse gas emissions.* Article 194 of the Convention provides that States "shall take, *individually or jointly* as appropriate, *all* measures consistent with this Convention that are *necessary* to prevent, reduce and control pollution of the marine environment *from any source*" (article 194, paragraph 1, first part, emphasis added). As anthropogenic greenhouse gas emissions into the atmosphere cause pollution of the marine environment,[108] States have an obligation to "prevent, reduce and control" such pollution. This obligation, like the whole of Part XII, must be read in light of the general obligation set out in article 192, which provides that "States have the obligation to protect and preserve the marine environment."[109]

101. Paragraph 1 of article 194, which refers to damage to the marine environment as such, is supplemented by paragraph 2, which specifies that States shall 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, and that pollution arising from incidents or activities under their jurisdiction or control does not spread beyond the areas where they exercise sovereign rights in accordance with th[e] Convention." [Emphasis added]. This obligation extends beyond the marine environment, as it is in line with a fundamental principle of international environmental law in general: principle 21 of the Stockholm Declaration.[110] Its customary scope is well accepted. The International Court of Justice has observed that

> the principle of prevention, *as a customary rule*, has its origins in the due diligence that is required of a State in its territory. It is "every State's obligation

[107] See para. 133 of the present written statement.
[108] See paras. 59-96 of the present written statement.
[109] See, with regard to article 192 of the Convention, paras. 140-147 of the present written statement.
[110] *I.C.J. Reports 1996 (I)*, *op. cit.*, p. 242, para. 29; ICJ, Judgment, 20 April 2010, *Pulp Mills on the River Uruguay (Argentina* v. *Uruguay)*, Judgment, *I.C.J. Reports 2010*, p. 14, para. 197; See PCA, Award of 12 July 2016, *op. cit.*, para. 944; *I.C.J. Reports 2015*, *op. cit.*, p. 665, para. 118.

not to allow knowingly its territory to be used for acts contrary to the rights of other States" (*Corfu Channel (United Kingdom v. Albania), Merits, Judgment, I.C.J. Reports 1949*, p. 22). A State is thus obliged to use all the means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State. The Court has established that this obligation "is now part of the corpus of international law relating to the environment" (*Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996 (I)*, p. 242, para. 29).[111]

102. In view of the distinctiveness of the marine environment and the global nature of the pollution caused to it by greenhouse gas emissions, irrespective of the location of the sources of emission, the customary rule and the obligation to act in accordance with the Convention, as set out in article 194, paragraphs 1 and 2, are merged into one single broad and exigent obligation, incumbent on all States, to take all measures necessary to "prevent, reduce and control" pollution of the marine environment caused by greenhouse gas emissions.

Content and scope of the obligation to take all measures necessary to "prevent, reduce and control" pollution caused by greenhouse gas emissions.

103. *Obligation of due diligence.* Article 194, paragraphs 1 and 2, essentially lays down an obligation to prevent – in the broad sense – pollution ("*prevent, reduce and control*"), which can be analysed as an obligation of due diligence. Such an obligation is not an obligation of result, which would require that the marine environment not be contaminated by any pollution. As the International Law Commission has stated, "[o]bligations of prevention are usually construed as best efforts obligations, requiring States to take all *reasonable or necessary* measures to prevent a given event from occurring, but without warranting that the event will not occur."[112] It is an obligation of conduct, but an exigent obligation of conduct, for States to "us[e] for this purpose the *best practicable means* at their disposal, and *in accordance with their capabilities*" and to endeavour to "*harmonize their policies in this connection*" (article 194, paragraph 1, second part).

[111] *I.C.J. Reports 2010*, *op. cit.* p. 45, para. 101 (emphasis added).
[112] International Law Commission, *Draft articles on Responsibility of States for Internationally Wrongful Acts*, Art. 14, annexed to General Assembly resolution 56/83 of 12 December 2001 (emphasis added).

104. Recent international practice and case law have helped to clarify the contours of this due diligence obligation. For example, the Seabed Disputes Chamber of this Tribunal stated in its 2011 opinion that

> [the] sponsoring State's obligation "to ensure" is not an obligation to achieve, in each and every case, the result that [the person or private entity] complies with the aforementioned obligations. Rather, it is an obligation to deploy adequate means, to exercise best possible efforts, to do the utmost, to obtain this result. To utilize the terminology current in international law, this obligation may be characterized as an obligation "of conduct" and not "of result", and as an obligation of "due diligence".[113]

105. *Specific rules applicable to different sources of pollution*. As referred to above,[114] article 194 of the Convention sets out a general framework which is then supplemented and clarified, in particular by section 5 on international rules and national legislation to prevent, reduce and control pollution of the marine environment (articles 207 to 213), whose provisions cover specific sources of pollution. Article 207 on pollution from land-based sources and article 212 on pollution from atmospheric sources appear to be the most directly relevant to answering the question put to the Tribunal. Article 207, paragraph 5, provides that "[l]aws, regulations, measures, rules, standards and recommended practices and procedures referred to in paragraphs 1, 2 and 4 shall include those designed to *minimize, to the fullest extent possible*, the release of toxic, harmful or noxious substances, especially those which are persistent, into the marine environment."

106. *Severity of the specific obligations of States.* The content of the due diligence obligation is not absolute but variable. Defining its content in the present case must lead the Tribunal to determine the type of measures "necessary" to "prevent, reduce and control pollution of the marine environment" caused by anthropogenic greenhouse gas emissions into the atmosphere. The standard here appears particularly severe for the following reasons.

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[113] *ITLOS Reports 2011*, *op. cit.*, p. 41, para. 110.
[114] See paras. 99-102 of the present written statement.

107. *Determining the standard of due diligence.* As stated by the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea:

> The content of "due diligence" obligations may not easily be described in precise terms. Among the factors that make such a description difficult is the fact that "due diligence" is a *variable concept*. It may *change over time* as measures considered sufficiently diligent at a certain moment may become not diligent *in light, for instance, of new scientific or technological knowledge.* It may also *change in relation to the risks involved in the activity.* …. The standard of due diligence has to be more *severe* for the riskier activities.[115]

The specific obligations of States to prevent, reduce and control pollution of the marine environment caused by anthropogenic greenhouse gas emissions into the atmosphere should be particularly severe in view of the seriousness of the damage to the marine environment caused or which could be caused in the future by climate change, and the urgency of preventing, reducing and controlling this pollution. This awareness of the seriousness of the situation and the pressing need to act is currently the subject of an international consensus, as demonstrated by the Lisbon Declaration adopted at the end of the United Nations Ocean Conference in June 2022:

> We are … deeply alarmed by the global emergency facing the ocean. Sea levels are rising, coastal erosion is worsening and the ocean is warmer and more acidic. Marine pollution is increasing at an alarming rate, a third of fish stocks are overexploited, marine biodiversity continues to decrease and approximately half of all living coral has been lost, while alien invasive species pose a significant threat to marine ecosystems and resources.
>
> …
>
> We reaffirm that climate change is one of the greatest challenges of our time, and we are deeply alarmed by the adverse effects of climate change on the ocean and marine life, including the rise in ocean temperatures, ocean acidification, deoxygenation, sea level rise, the decrease in polar ice coverage, shifts in the abundance and distribution of marine species, including fish, the decrease in marine biodiversity, as well as coastal erosion and extreme weather events and related impacts on island and coastal communities ….[116]

[115] *ITLOS Reports 2011*, *op. cit.*, p. 43, para. 117 (emphasis added).
[116] UN General Assembly resolution 76/296, *Our ocean, our future, our responsibility*, 21 July 2022, paras. 4 and 5.

108. *Threshold required to prevent damage.* With regard to cumulative pollution, which has numerous sources, the question necessarily arises of the threshold required to prevent, reduce and control pollution of the marine environment caused by anthropogenic greenhouse gas emissions into the atmosphere. The aim is to prevent "significant" harm, which, according to the International Law Commission in its draft articles on the prevention of transboundary harm from hazardous activities, means more "than 'detectable', but need not be at the level of 'serious' or 'substantial'."[117] As already recalled, the International Court of Justice considered in its 2010 judgment in the *Pulp Mills* case that "[a] State is […] obliged to use all the means at its disposal in order to avoid activities which take place in its territory, or in any area under its jurisdiction, causing significant damage to the environment of another State."[118] In French, the term *sensible* seems to refer to a lower threshold than *significative*, but it should however be noted that the English version of the aforementioned Court judgment uses the term "significant". The International Law Commission is of the view that it is the "combined effect of 'risk' and 'harm' which sets the threshold" of seriousness.[119] The draft articles of the International Law Commission identify a certain number of "factors and circumstances" that are relevant in determining the requisite threshold to prevent, reduce and control pollution of the marine environment caused by anthropogenic greenhouse gas emissions into the atmosphere. They include "the degree of risk of significant transboundary harm and of the availability of means of preventing such harm, or minimizing the risk thereof or repairing the harm" and "the risk of significant harm to the environment and the availability of means of preventing such harm, or minimizing the risk thereof or restoring the environment".[120] To be precise, the serious, global and urgent nature of the harm to the marine environment resulting from GHG emissions, and given the difficulty – or even impossibility in some instances – of materially repairing such harm, means that this harm must be considered "significant".

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[117] *Yearbook of the International Law Commission*, 2001, vol. II (Part 1), p. 163. See, in the same sense, "States have a positive "'duty to prevent, or at least mitigate' significant harm to the environment when pursuing large-scale construction activities""; PCA, Partial Award, 18 February 2013, *Indus Waters Kishenganga Arbitration (Pakistan* v. *India)*, PCA Award Series (2014), para. 451. On the distinction between measurable and "significant" harm, see also, ICJ, Judgment of 16 December 2015, *I.C.J. Reports 2015*, *op. cit.*, para. 192.

[118] *I.C.J. Reports 2010*, *op. cit.*, p. 45, para. 101 (emphasis added).

[119] Aforementioned draft articles of the International Law Commission, article 10, Factors involved in an equitable balance of interests, *Yearbook of the International Law Commission*, 2001, vol. II (Part 1), p. 158.

[120] *Ibid*.

109. *A threshold informed by the Paris Agreement.* The threshold for climate change is informed by the objective set out in the Paris Agreement to hold "the increase in global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change" (article 2, paragraph 1, subparagraph a). This is an objective that has reached broad consensus among States as a result of dialogue between scientific experts and State representatives.[121] Although the objective of a 1.5° limit was foremost aspirational in 2015, it was already established that it would "significantly reduce the risks and impacts of climate change", which the IPCC report of 2018 largely confirmed.[122] This objective has since taken on an increasing importance. It is recalled in several decisions of the Conference of the Parties to the Paris Agreement (hereinafter the "CMA"), along with the urgency to act that it entails. For example, in Decision 1/CMA.3 of 2021 "Glasgow Climate Pact", the Conference "[r]ecognizes that the impacts of climate change will be much lower at the temperature increase of 1.5°C compared with 2°C and *resolves to pursue efforts to limit the temperature increase to 1.5°C*".[123] It "[f]urther recognizes that this requires *accelerated action in this critical decade*, on the basis of the best available scientific knowledge and equity, reflecting common but differentiated responsibilities and respective capabilities in the light of different national circumstances and in the context of sustainable development and efforts to eradicate poverty".[124]

110. Despite their designation, decisions of the Conference of the Parties are not legally binding. Nevertheless, as the International Court of Justice has stated in regard to the recommendations of the Whaling Commission, "[t]hese recommendations, which take the form of resolutions, are not binding. However, when they are adopted by consensus or by a unanimous vote, they may be *relevant for the interpretation of the*

[121] See PCA, Award of 12 July 2016, *op. cit.*, para. 956. In this award, the seriousness of the environmental harm is to some extent confirmed by the international conventions that demonstrate the international consensus on the threatened or endangered nature of certain species. The sea turtles found on the Chinese vessels appear in Appendix I of CITES, which lists the endangered species that are prohibited from all international trade.
[122] IPCC, 2018: Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty, *op. cit.*, pp. 3-24.
[123] Decision 1/CMA.3 "Glasgow Climate Pact" (2021), para. 21.
[124] *Ibid*., para. 23 (emphasis added).

Convention".[125] The CMA's decisions are therefore relevant for the purposes of interpreting the Paris Agreement; specifically, they strengthen the scope of the objective of limiting temperatures to 1.5°C relative to the letter of the Paris Agreement and emphasize the urgency of taking action.

111. From this perspective, in the context of a synergetic interpretation of UNCLOS and the Paris Agreement, pursuant in particular to article 237 of the Convention, the States Parties to the Convention must fulfil their obligations under the Paris Agreement in a manner consistent with the general principles and objectives of UNCLOS. The measures "necessary" (according to the terminology of article 194, paragraph 2; article 207, paragraph 2; or article 212, paragraph 2) to prevent, reduce and control pollution of the marine environment caused by anthropogenic greenhouse gas emissions into the atmosphere are those which make it possible to achieve the collective objective of limiting temperatures under the Paris Agreement. Article 2 of the Paris Agreement should be read in conjunction with article 4, paragraph 1, which states that "Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science". It is for all Parties to the Paris Agreement to "communicate ambitious efforts" that represent a progression over time (article 3) in the context of their nationally determined contributions to the global response to climate change.

112. *Requirement of effectiveness of the measures.* The adoption of the Paris Agreement, with the ambitious objective set out in article 2, is a major step towards enabling States to fulfil their obligations under the Convention to prevent, reduce and control pollution of the marine environment. However, it should be noted that the Convention also requires that the measures adopted be effective. Accordingly, it provides that States "*shall enforce* […] their laws and regulations adopted […] and shall adopt laws and regulations and take other measures necessary to *implement* applicable international rules and standards established through competent international organizations or diplomatic conference to prevent, reduce and control pollution of the

[125] ICJ, Judgment, 31 March 2014, *Whaling in the Antarctic (Australia* v. *Japan: New Zealand intervening), I.C.J. Reports 2014*, p. 248, para. 46.

marine environment from or through the atmosphere" (article 222, emphasis added). In this respect, countries should intensify the ambition of their greenhouse gas mitigation policies to place themselves on the trajectory to limit greenhouse gases, as set out in article 2 of the Paris Agreement and in line with the Glasgow Pact, which "[s]tresses the urgency of enhancing ambition and action in relation to mitigation adaptation and finance in this critical decade to address gaps in the implementation of the goals of the Paris Agreement". This CMA decision also "[r]ecognizes that limiting global warming to 1.5°C requires rapid, deep and sustained reductions in global greenhouse gas emissions, including reducing global carbon dioxide emissions by 45 per cent by 2030 relative to the 2010 level and to net zero around mid-century, as well as deep reductions in other greenhouse gases".[126]

113. *Flexibility and differentiation.* While the Convention is exigent, it still affords a certain flexibility to States, which must use "*the best practicable means at their disposal and in accordance with their capabilities*" (article 194, paragraph 1, emphasis added). As underscored by the Tribunal's Seabed Disputes Chamber, the criteria for implementing the obligation "may be stricter" for developed States than for developing States.[127] The decisive factors here are scientific knowledge and the technical and financial capabilities available to States. The UNFCCC and the Paris Agreement, which both refer to the principle of common but differentiated responsibilities, echo UNCLOS in this respect. In particular, the Paris Agreement refers several times to the "principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances", while very clearly committing "*all* Parties" to "ambitious efforts" (article 3, emphasis added).

114. *Obligation not only to adopt the rules and measures necessary, but also to exercise a level of vigilance in their enforcement and administrative control applicable to public and private operators.* The requirement to take the measures "necessary" to "prevent, reduce and control pollution of the marine environment" caused by greenhouse gas emissions means that States must monitor the activities under its jurisdiction and control. In this sense, the provisions of the Convention require States

[126] Decision 1/CMA.3 "Glasgow Climate Pact" (2021), para. 5.
[127] *ITLOS Reports 2011*, *op. cit.*, p. 54, para. 161.

to adopt the necessary and appropriate measures to limit greenhouse gas emissions but also to ensure that operators acting under their control or jurisdiction, on land, in the air or at sea, including the high seas, comply with these measures.

115. This was reiterated by the International Court of Justice, which considers that the principle of prevention entails for States "not only the adoption of appropriate rules and measures, but also a *certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators, such as the monitoring of activities undertaken by such operators*".[128] The Chamber for Seabed Disputes, in its opinion of 2011, was also intransigent in that respect:

> Support for the enforcement of contractor's obligations under the domestic law of the sponsoring State is an essential requirement in a number of national jurisdictions. But laws and regulations by themselves may not provide a *complete* answer in this regard. Administrative measures aimed at securing *compliance* with them may also be *needed*. Laws, regulations and administrative measures may include the establishment of enforcement mechanisms for *active* supervision of the activities of the sponsored contractor.[129]

This Tribunal confirmed this view in the opinion rendered in 2015, affirming that States must adopt appropriate legislation to deter and control illegal, unreported and unregulated (IUU) fishing activities by public and private operators. The flag State must take "all necessary and appropriate measures to meet its 'due diligence' obligations to *ensure that vessels flying its flag* do not conduct IUU fishing activities in the exclusive economic zones of the SRFC Member States."[130] It is "under an obligation to exercise *effectively* its jurisdiction and control in administrative matters over fishing vessels flying its flag".[131] Moreover, "[s]anctions applicable to involvement in IUU fishing activities must be *sufficient to deter violations* and to deprive offenders of the benefits accruing from their IUU fishing activities."[132] These obligations were also recalled in the arbitral award in the *South China Sea* case.[133] This is an extremely important consideration for the question put to the Tribunal, as most greenhouse gas emissions are caused by private actors, whether they be individuals or companies.

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[128] *I.C.J. Reports 2010*, *op. cit.*, para. 197 (emphasis added).
[129] *ITLOS Reports 2011*, *op. cit.*, p. 68, para. 218.
[130] *ITLOS Reports 2015*, *op. cit.*, p. 51, paras. 147-148 (emphasis added).
[131] *Ibid*., para. 137 (emphasis added).
[132] *Ibid*., para. 138.
[133] See PCA, Award of 12 July 2016, *op. cit.*, paras. 964, 974.

116. *Geoengineering.* The measures "necessary" must not only result in *preventing* and *controlling* future pollution but also in *reducing* pollution that has already occurred, which calls on States to take action to restore the marine environment and re-establish fragile or threatened ecosystems. In the context of anthropogenic greenhouse gas emissions into the atmosphere, this involves strengthening carbon sinks (oceans, forests in formation, peat bogs, etc.) to store atmospheric carbon through natural or artificial mechanisms. With regard to storage in the ocean, the measures taken must not disregard the "duty not to transfer damage or hazards or transform one type of pollution into another" set out in article 195 of the Convention, which provides that "[i]n taking measures to prevent, reduce and control pollution of the marine environment, States shall act so as not to transfer, directly or indirectly, damage or hazards from one area to another or transform one type of pollution into another."

117. Articles 194 and 195 must be read here in conjunction with article 196 of the Convention on the use of technologies or the introduction of alien or new species in the marine environment. Under article 196, paragraph 2, States wishing to reduce pollution which has already occurred owing to geoengineering techniques are not dispensed from applying a precautionary approach. On the contrary: States wishing to "reduce" this pollution by those means must necessarily apply a precautionary approach.

118. It should be recalled that the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea has considered that obligations of prevention go as far as to include, where appropriate, a precautionary approach: "[T]he precautionary approach is also an integral part of the general obligation of due diligence of sponsoring States, which is applicable even outside the scope of the [Nodules Regulations and the Sulphides Regulations]".[134] Thus for the ITLOS Chamber, "[t]he due diligence obligation of the sponsoring States requires them to take all appropriate measures to prevent damage that might result from the activities of contractors that they sponsor", including in "situations where scientific evidence concerning the scope and potential negative impact of the activity in question is insufficient but were there are plausible

[134] *Ibid*., para. 131.

indications of potential risks."[135] This reasoning, maintained in the context of the Area, can be transposed to Part XII, since the measures potentially taken to combat climate change, and in particular geoengineering, fall within the scope of "situations where scientific evidence concerning the scope and potential negative impact of the activity in question is insufficient but where there are plausible indications of potential risks."[136]

119. The potential risks to the marine environment posed by these techniques may be serious or irreversible, even though Principle 15 of the Rio Declaration states that "[i]n order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."[137] On several occasions, this Tribunal has urged upon States "prudence and caution"[138] [139] with regard to the protection of the marine environment. In the same vein, it should be noted that in its draft guidelines on the protection of the atmosphere, adopted at second reading in 2021, the ILC recalled that geoengineering activities "should only be conducted with prudence and caution, and subject to any applicable rules of international law, including those relating to environmental impact assessment."[140]

120. *Obligation to cooperate.* The general obligation of prevention also includes an obligation to cooperate, which, to repeat the very words of this Court, "is a fundamental principle in the prevention of pollution of the marine environment under Part XII of the Convention and general international law".[141] It is conceived as one of the means for States to implement the Convention. The significance of this obligation, which has both customary and treaty sources, is not in doubt; it has been reiterated on several occasions

[135] *Ibid.*
[136] *Ibid.*
[137] Rio Declaration on Environment and Development, A/CONF.151/26 (Vol. I), 12 August 1992.
[138] *ITLOS Reports 1999*, *op. cit.*, p. 280, para.77, paras. 79-80; *ITLOS Reports 2001*, *op. cit.*, pp. 95 *et s.*, para. 84.
[139] ITLOS, Order, 8 October 2003, *Case concerning Land Reclamation by Singapore in and around the Straits of Johor (Malaysia* v. *Singapore)*, *ITLOS Reports 2003*, pp. 10 *et s.*, para. 99. The French version of "prudence and caution" is rendered as "*la circonspection et la prudence*" and not "*prudence et précaution*".
[140] See Guideline 7 and its commentary, in Report of the ILC on the work of its seventy-second session (2021), A/76/10, pp. 33-35.
[141] *ITLOS Reports 2001*, *op. cit.*, p.110, para. 82. This was recalled by ITLOS in Case No. 12, *ITLOS Reports 2003*, *op. cit.*, p. 25, para. 92, and in its Advisory Opinion of 2015, *ITLOS Reports 2015*, *op. cit.*, p. 43, para. 140.

by this Tribunal.[142] It was also recalled in the *South China Sea* arbitration award.[143] The International Court of Justice has held along the same lines, with regard to environmental damage more generally, that "it is by co-operating that the States concerned can jointly manage the risks of damage to the environment that might be created by the plans initiated by one or other of them, so as to prevent the damage in question".[144] This statement can be transposed to the risks caused by greenhouse gas emissions, which are the source of a global and planetary threat. For that matter, the Parties to the UNFCCC acknowledged, in the preamble thereto, that "the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions".

121. *Joint development of regional or universal rules.* As part of this obligation to cooperate, among the measures to prevent, reduce and control pollution of the marine environment, States "shall endeavour to harmonize their policies" (article 194, paragraph 1). The Convention also provides generally that they "shall cooperate on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, for the protection and preservation of the marine environment, taking into account characteristic regional features" (article 197). Reference to regional cooperation can also be found in the specific provisions on different sources of pollution, the most relevant in this case being article 207 (pollution from land-based sources) and article 212 (pollution from or through the atmosphere). States are invited ("shall endeavour") to cooperate on a global basis to establish "rules, standards and recommended practices and procedures" (article 207, paragraph 4) or "global […] rules [and] standards (article 212, paragraph 3) for that purpose, and re-examine them "from time to time as necessary" (article 207, paragraph 4). By cooperating, as they are invited to do under the Convention, States Parties establish rules of international law that are essential to

[142] *ITLOS Reports 2001*, *op. cit.*, para. 82; *ITLOS Reports 2003*, *op. cit.*, p. 25, para. 92; *ITLOS Reports* 2015, *op. cit.*, p. 43, para. 140 and para. 77.
[143] See PCA, Award of 12 July 2016, *op. cit.*, para. 946, paras. 984-986.
[144] *I.C.J. Reports 2010*, *op. cit.*, p. 14, para. 77.

the implementation of UNCLOS for the prevention of pollution of the marine environment. The arbitration award in the *South China Sea* case considers in this respect that "[t]he content of the general obligation in Article 192 is *further detailed* in the subsequent provisions of Part XII, including Article 194, *as well as by reference to specific obligations set out in other international agreements, as envisaged in Article 237 of the Convention*".[145] Article 192 thus enshrines a general obligation, which can be broken down into various "specific" obligations, contained either in other provisions of UNCLOS or in special conventions.[146]

122. *The obligation to cooperate in good faith.* The obligation of States to cooperate in this matter was clarified by this Tribunal in its 2015 opinion, in relation to article 63, paragraph 1, and article 64, paragraph 1, of the Convention. The Tribunal observed that "[t]he obligation to 'seek to agree…' under article 63, paragraph 1, and the obligation to cooperate under article 64, paragraph 1, of the Convention are 'due diligence' obligations which require the States concerned to consult with one another in good faith, pursuant to article 300 of the Convention. The consultations *should be meaningful*, in the sense that *substantial effort* should be made by all States concerned, with a view to adopting effective measures necessary to coordinate and ensure the conservation of shared stocks. … [T]he conservation and development of shared stocks in the exclusive economic zone of an SRFC Member State require from that State *effective measures* aimed at preventing over-exploitation of such stocks *that could undermine their sustainable exploitation and the interests of neighbouring Member States*."[147]

123. France is of the view that this interpretation can be transposed to greenhouse gases. The obligation to cooperate is one of the specific obligations incumbent on States to prevent, reduce and control pollution of the marine environment caused by greenhouse gases. Part XII of the Convention must be read here in conjunction with its article 300, which entails that a "substantial effort" must be made by the States concerned "with a view to adopting effective measures necessary" to prevent, reduce

[145] See PCA, Award of 12 July 2016, *op. cit.*, para. 942
[146] In this sense, Alexander Proelss (ed.), *United Nations Convention on the Law of the Sea 1982: A commentary*, 1st ed., Munich, Oxford, Baden-Baden, C. H. Beck, Hart, Nomos, 2017, p. 1329.
[147] *ITLOS Reports 2015, op. cit.*, p.59, para. 210 (emphasis added).

and control pollution of the marine environment caused by greenhouse gases. For more than 30 years, States have effectively been cooperating to develop and draft international rules, as demonstrated by the adoption of the UNFCCC, the Kyoto Protocol and later the Paris Agreement, as well as the measures taken to reduce greenhouse gas emissions from international transport within the framework of the IMO or the ICAO, and even on a regional scale, such as that of the European Union.[148]

124. *Research and monitoring*. The general obligations of prevention and cooperation subsequently take shape in the form of more specific obligations. The Convention places an obligation on States and competent international organizations to encourage and facilitate the development and "conduct of marine scientific research" (article 240), and "States and competent international organizations shall […] promote international cooperation in marine scientific research for peaceful purposes" (article 242, paragraph 1). More specifically, "States shall cooperate, directly or through competent international organizations, for the purpose of promoting studies, undertaking programmes of scientific research and encouraging the exchange of information and data acquired about pollution of the marine environment. They shall endeavour to participate actively in regional and global programmes to acquire knowledge for the assessment of the nature and extent of pollution, exposure to it, and its pathways, risks and remedies" (article 200). They shall also "monitor[] the risks or effects of pollution" (article 204), "publish reports of the results obtained" (article 205) and assess the potential effects of "planned activities under their jurisdiction or control" which "may cause substantial pollution of or significant and harmful changes to the marine environment" (article 206). The international community is heavily invested in this matter, most notably through UNESCO's Intergovernmental Oceanographic Commission and the UN World Ocean Assessment. As mentioned above,[149] the IPCC has likewise contributed through its general and special assessment reports to summarizing knowledge on the impacts of greenhouse gas emissions on the marine environment. The BBNJ Agreement also includes a section on environmental impact assessment to operationalize and give concrete form to the obligation set out in article 206 of the Convention.

[148] On the action of the European Union, see, in particular, para. 81 of the written statement submitted by the EU (WK8206/2023 INIT).
[149] See, in particular, para. 60-62 of the present written statement.

125. *Assistance to developing States*. The obligation to cooperate also covers "the allocation of appropriate funds and technical assistance" to developing States (article 203; see also article 202, in particular (a) and (c)). The adoption and implementation of the UNFCCC and the Paris Agreement also enable States Parties to fulfil these obligations "directly or through competent international organizations" (article 202). To that end, various technical and financial assistance mechanisms have been put in place,[150] such as through the Global Environment Fund.

IV.2 Second subquestion: What are the specific obligations of State Parties to protect and preserve the marine environment in relation to climate change impacts, including ocean warming and sea level rise, and ocean acidification?

(a) General architecture of the Convention regarding the protection and preservation of the marine environment

126. The protection and preservation of the marine environment is the very object of Part XII of UNCLOS, which is entirely devoted to it, as reflected in its title. This part, comprising 45 articles, begins with article 192, which recalls the "general obligation" of States to "protect and preserve the marine environment", and ends with article 237 on "obligations under other conventions on the protection and preservation of the marine environment". The latter article deals with the relation between the provisions of UNCLOS and the "specific obligations" on States under other conventions on the same topic, regardless whether those other conventions were concluded before UNCLOS or in accordance with the general principles laid down therein. Between these two articles, certain provisions mentioned above[151] more specifically concern the prevention, reduction and control of the marine environment. Although they also form part of the mechanism relating to the "protection and preservation of the marine environment" and therefore may assist in identifying specific obligations of States to

[150] See in the UNFCCC: article 4, para.1 para.3, para.5, para. 8, para. 9; article 5 (b); article 6 (a) (iv); article 92 (c); article 11, para.1; art. 12, para. 4. See in the Paris Agreement, article 6, para. 8; article 7, para.7; article 10; article 11; article 13.

[151] See para. 1 or part IV.1 of the present written statement.

"protect and preserve the marine environment in relation to climate change impacts" and "ocean acidification", these provisions will not be examined in this part, since they have already been discussed under the first part of the question put to the Tribunal. The observations that follow will therefore endeavour to focus on the provisions which, over and beyond the question of pollution of the marine environment, may enable the Tribunal to identify the "special" obligations of States Parties to UNCLOS to protect and preserve the marine environment, "in relation to climate change impacts, including ocean warming and sea level rise, and ocean acidification".

127. In addition, outside of Part XII, other provisions of the Convention make explicit reference to the protection and preservation of the marine environment, beyond the sole question of its pollution. This is so, in particular, with article 56, paragraph 1, subparagraph b(iii) (jurisdiction of the coastal State in the exclusive economic zone with regard to the protection and preservation of the marine environment), article 123 (cooperation of States bordering enclosed or semi-enclosed areas), article 145 (protection of the marine environment with respect to activities in the Area), article 240, subparagraph d) (on the conduct of marine scientific research), and article 266, paragraph 2 (promotion of the development and transfer of marine technology, in particular with respect to the protection and preservation of the marine environment). These provisions may, if necessary, be taken into account by the Tribunal insofar as they would make it possible either to specify the nature or content of the specific obligations of States Parties in relation to climate change impacts and ocean acidification, or to determine their scope. Like Part XII as a whole, they form part not only of the text but also of the context in light of which each provision of the Convention relevant to the present advisory proceedings must be interpreted.[152]

128. The States Parties to the Convention further recognize, in preambular paragraph 4, "the desirability of establishing through this Convention […] a legal order for the seas and oceans which […] will promote the […] protection and preservation of the marine environment". While not legally binding as such, the preamble is also part of the relevant context for interpretation and is also an expression of the object and

[152] According to the rule of interpretation reflected in article 31, paragraph 2, of the Vienna Convention on the Law of Treaties.

purpose of the Convention, in light of which its provisions are to be interpreted.[153] In the same vein, it may be recalled that under article 2, paragraph 1, of the Agreement relating to the Implementation of Part XI of UNCLOS, concluded in New York on 28 July 1994, the provisions of that Agreement and of Part XI "shall be interpreted and applied together as a single instrument" and that the preamble to the Agreement emphasizes that States Parties are "[m]indful of the importance of the convention for the protection and preservation of the marine environment and of the growing concern for the growing environment".

129. Before specifying the content of the specific obligations of States Parties to UNCLOS to protect and preserve the marine environment "in relation to climate change impacts" and "ocean acidification" within the scope of the question put to the Tribunal, France wishes first to clarify the relationship between the marine environment as such on the one hand, and climate change and ocean acidification on the other hand, in order to determine to what extent the latter and their effects may fall within the scope of the Convention.

Scope of the specific obligations to protect and preserve the marine environment "in relation" to climate change impacts and ocean acidification

130. In order to understand the phrase "in relation to climate change impacts" as used in the question put to the Tribunal, it is first necessary to clarify the links between the marine environment and climate, so as to determine whether and to what extent such links may fall within the scope of the Convention.

131. While the marine environment is an area comprising various elements interacting with each other,[154] even if subject to a single legal protection regime established by the Convention, marine ecosystems themselves are in constant interaction with the climate system, as mentioned above,[155] hence the interest of the

[153] According to the rule of interpretation reflected in article 31, para. 1 of the Vienna Convention on the Law of Treaties. Referring to the preamble to identify the object and purpose of UNCLOS, see *ITLOS Reports 2015, op. cit.* p. 32, para. 102.
[154] With regard to the definition of marine environment, see paras. 47-53 of the present written statement.
[155] See, in particular, paras. 72, 98 above.

question put to the Tribunal which must be read in light of these circumstances. There is a two-way relationship between the marine environment and the climate.

132. First and foremost, oceans play a fundamental role in climate regulation, not least because they absorb more than 90 per cent of the heat produced by greenhouse gases, which is then distributed through ocean currents, in addition to some 30 per cent of atmospheric carbon dioxide (CO2 storage), thereby acting as a natural carbon sink, while producing over half of the oxygen necessary for life on earth.[156] Oceans are thus part of the "climate system", defined by the UNFCCC as "the totality of the atmosphere, hydrosphere, biosphere and geosphere and their interactions."[157]

133. At the same time, climate change has substantial impacts on the marine environment, as shown above.[158] Increased CO2 emissions into the atmosphere lead to increased absorption by oceans, which in turn leads to their acidification. This has harmful effects on certain marine life (such as coral, molluscs and plankton) and threatens the survival of many species. Global warming, for its part, causes seawater temperatures to rise, which could have serious effects on marine ecosystems, including coral reefs (coral bleaching and dieback), and also accelerate the proliferation of invasive species and the spread of marine diseases. Damaged ecosystems can, in turn, exacerbate the effects of climate change by releasing carbon into the atmosphere. Global warming also leads to the melting of glaciers and the thermal expansion of oceans, causing sea levels to rise, which in turn has a direct impact on coastal ecosystems and the communities that depend on them, and contributes to the transfer of continental pollution to the ocean, which then affects marine ecosystems. Climate change can also disrupt ocean currents, which themselves play a crucial role in regulating regional and global climate by redistributing heat across oceans. These disruptions can also intensify the frequency and intensity of extreme weather events (such as tropical storms, hurricanes and cyclones), causing major damage to marine ecosystems and coastal habitats.[159]

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[156] IPCC, *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate, op. cit.*, p. 7.
[157] See article 1, para. 3 of the UNFCCC.
[158] See, in particular, in this sense, paras. 86-94.
[159] See, in particular, chapters 4 and 5 of the *IPCC Special Report on the Ocean and Cryosphere in a Changing Climate, op. cit.*; and chapter 9 of *Second World Ocean Assessment, op. cit.*, vol. II, pp. 59-77. See also paras. 79-96 of the present written statement (on the "deleterious effects" of GHG emissions on the marine environment).

134. Irrespective of whether some of these climate change impacts fall within the scope of the Convention as "pollution" of the marine environment, the second part of the question put to the Tribunal involves consideration of the very existence of these impacts in terms of the interactions between the marine environment and the climate and examination of how the regime for the protection and preservation of the marine environment enshrined in the Convention can contribute a response by identifying the specific obligations that arise for States Parties.

135. Article 192, which introduces Part XII of the Convention, does not specify against which threats the marine environment must be protected and preserved, or even for what purpose (other than that, previously cited in the preamble, of "establishing a legal order for the seas and oceans which will facilitate […] the protection and preservation of the marine environment"). All types of threat can therefore be involved, including those linked to climate change. Even if the latter is not envisaged in UNCLOS, the Convention must be interpreted in such a way as to be able to adapt to the new challenges posed by climate change, which implies that both current and future impacts are concerned, as the arbitral tribunal emphasized in the *South China Sea* case.[160]

136. This evolutive interpretation can be based on a teleological interpretation of the Convention (in light of its object and purpose), but also on a systemic interpretation, taking into account relevant rules of international law applicable in the relations between the parties.[161] The Framework Convention on Climate Change explicitly and repeatedly recognizes the interactions between the climate system and marine ecosystems. In its preamble, the UNFCCC refers to the "role" and "importance in terrestrial and *marine* ecosystems of sinks and reservoirs of greenhouse gases", and "the possible adverse effects of sea-level rise on islands and coastal areas, particularly low-lying coastal areas". The UNFCCC also sets the ultimate goal, i.e., "in accordance with the provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference

[160] See PCA, Award of 12 July 2016, *op. cit.*, p. 373, para. 941.
[161] In accordance with the rule in article 31, para. 3 (c) of the Vienna Convention on the Law of Treaties.

with the climate system",[162] by promoting "the enhancement […] of sinks and reservoirs of all greenhouse gases not controlled by the Montreal Protocol, including biomass, forests and *oceans* as well as other terrestrial, coastal and *marine ecosystems*".[163]

137. As mentioned above,[164] the Paris Agreement likewise makes reference to the links between climate and the marine environment, noting in its preamble "the importance of ensuring the integrity of all ecosystems, *including oceans*".[165] This is also one of the objectives of the BBNJ Agreement, to which, as an implementing agreement of UNCLOS, regard must be had in the framework of mutual supportiveness under article 237 of the Convention in particular. Its preamble recognizes "the need to address, in a coherent and cooperative manner, biodiversity loss and degradation of ecosystems of the ocean, due to, in particular, climate change impacts on marine ecosystems, such as warming and ocean deoxygenation, as well as ocean acidification, pollution, including plastic pollution, and unsustainable use". Article 5, subparagraph g, further provides that States shall be guided by an "approach that builds ecosystems resilience, including *to adverse effects of climate change* and ocean acidification, and also maintains and restores ecosystem integrity, including the carbon cycling services that underpin the ocean's role in climate", in order to achieve the objectives of the Agreement, such as that appearing in article 14, subparagraph c, to "[p]rotect, preserve, restore and maintain biodiversity and ecosystems, including with a view to enhancing their productivity and health, and strengthen resilience to stressors, *including those related to climate change*, ocean acidification and marine pollution."

138. France considers that the phrase "in relation to" used in the question put to the Tribunal should be understood in light of the interactions between the marine environment and the climate. Rather than resorting to a restrictive phrase such as "caused by", which would have required the Tribunal to establish the facts inconsistently and examine complex questions of causality individually, the authors of the question used a more open and flexible phrase, which is consonant with the aim of

[162] UNFCCC, article 2.
[163] UNFCCC, article 4, para. 1 (d) (emphasis added).
[164] See, in particular, para. 87, above, of the present written statement.
[165] Paris Agreement of 2015, preambular paragraph 13.

the present advisory proceedings – that is, to identify the obligations applicable to States Parties to UNCLOS. The phrase "in relation to" is synonymous with "in consideration of" or "taking into account".[166] In other words, it is for the Tribunal to take into consideration climate change impacts in order to specify the nature, content and scope of the specific obligations arising from those impacts for States Parties to protect and preserve the marine environment. This is warranted insofar as the marine environment is in constant interaction with the climate system, and its protection (in the broadest sense) can be both a response to the consequences of climate change and a means of mitigating it.

(b) Relevance, content and scope of the obligation to "protect and preserve" the marine environment in relation to climate change impacts and ocean acidification, and specific obligations arising from those impacts

139. France considers that States Parties to UNCLOS indeed have "specific obligations" "to protect and preserve the marine environment in relation to climate change impacts, including ocean warming and sea level rise, and ocean acidification." The second part of the question put to the Tribunal is aimed precisely at identifying the object of these obligations and defining their content and scope. From this point of view, France sees it necessary to make the following remarks.

140. *A general obligation broken down into specific obligations.* According to article 192 (*General obligation*), States "shall have the obligation to protect and preserve the marine environment." Appearing at the head of Part XII of the Convention, it provides a guide for interpreting not only the content of this part but also the other parts of the Convention. This article is addressed to all States, regardless of the maritime area concerned, including where their sovereign rights are exercised, as indicated in article 193. The general character of this obligation also lies in the fact that article 192 does not specify the circumstances in which the marine environment must be protected and preserved, which means that it can be invoked to combat any form of degradation of the marine environment, even in the face of threats that have arisen since the adoption of the Convention. Accordingly, the mere fact that climate change and ocean

[166] *Dictionnaire de la langue française*, Robert, 2022, for the French version.

acidification constitute a specific and considerable threat to the marine environment is already sufficient in and of itself to give rise to a "specific" obligation with regard to its protection and preservation in this precise context, failing which article 192 would be deprived of any *effet utile* in this hypothesis.

141. More concretely, the practical utility of article 192 stems from the identification of specific obligations, which previous court decisions have gradually highlighted in different contexts but which may find application in that of climate change and ocean acidification. As early as 1999, the Tribunal considered that "the conservation of the living resources of the sea is an element in the protection and preservation of the marine environment",[167] before specifying in 2015 that "the flag State is under an obligation to ensure compliance by vessels flying its flag with the relevant conservation measures concerning living resources enacted by the coastal State for its exclusive economic zones because […] they constitute an integral element in the protection and preservation of the marine environment."[168]

142. In addition to the conservation of living resources, the arbitral tribunal constituted to rule on the *South China Sea* case went into detail on the nature and content of the obligation to protect and preserve the marine environment, in particular with regard to fragile ecosystems threated by the construction of artificial islands by China. The arbitrators in that case considered that, although worded in general terms, article 192 "does impose a duty on States Parties, the content of which is informed by the other provisions of Part XII and other applicable rules of international law."[169] Thus, article 192 "entails the positive obligation to take active measures to protect and preserve the marine environment",[170] making this general provision a genuine legal obligation, the content of which "is further detailed in the subsequent provisions of Part XII […] as well as by reference to specific obligations set out in other international agreements, as envisaged in Article 237 of the Convention."[171]

[167] *ITLOS Reports 1999*, *op. cit.* p. 295, para. 70.
[168] *ITLOS Reports 2015*, *op. cit.* p. 37, para. 120.
[169] See PCA, Award of 12 July 2016, *op. cit.*, p. 373, para. 941.
[170] *Ibid*.
[171] *Ibid*., para. 942.

143. *Obligation of due diligence*. France considers that article 192 must be interpreted as imposing an obligation of due diligence, akin to the obligation to prevent pollution, as referred to above,[172] which is also a component of the Convention, as will be shown below. In the *Pulp Mills* case, the International Court of Justice had to interpret article 41 of the Statute of the River Uruguay of 1975 (rather than UNCLOS), which requires Parties to "protect" and "preserve the aquatic environment". It saw in this an obligation of "due diligence", which "entails not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and the exercise of administrative control applicable to public and private operators".[173] This dual dimension – in terms of rules and in terms of surveillance of the rules and measures adopted – is also essential if the obligation to protect and preserve the marine environment is to be effective. In addition to imposing direct obligations on States and their bodies, this obligation also requires them to ensure that private activities under their jurisdiction and control do not harm the marine environment.[174] That being said, it remains an obligation of conduct, as States are not required to achieve the desired result, only to take appropriate measures to that end.[175]

144. Following the approach of the ICJ, the Seabed Disputes Chamber has attempted to clarify the content of this "due diligence" obligation, while emphasizing the difficulty of describing it in precise terms, not least because of its "variable" nature. According to the judges of the Tribunal, this concept may not only "change over time as measures considered sufficiently diligent at a certain moment may become not diligent enough in light, for instance, of new scientific or technological knowledge", but may "also change in relation to the risks involved in the activity", as the standard of diligence must be "more severe for the riskier activities."[176] It must therefore be assessed *in concreto*. In view of the seriousness and urgency of the situation,[177] confirmed by the most recent IPCC reports, climate change – notably ocean warming and rising sea levels, as well as ocean acidification – must be considered high risks, as they have already had serious impacts on the marine environment. France therefore considers that

[172] See, in particular, paras. 103 *et s.* of the present written statement.
[173] *I.C.J. Reports 2010*, *op. cit.*, p. 45, para. 197.
[174] See PCA, Award of 12 July 2016, *op. cit.*, para. 944.
[175] *ITLOS Reports 2015*, *op. cit.*, p.40, para. 129.
[176] *ITLOS Reports 2011*, *op. cit.*, p.43, para. 117.
[177] Recalled in the aforementioned Lisbon Declaration, A/CONF.230/2022/12, para. 4.

this situation calls for a higher standard of diligence, all while prioritizing the measures to be taken.[178]

145. It is not, however, a matter of prohibiting any activities that would have an impact on the marine environment because they might potentially contribute, in this specific case, to climate change or because they might limit the means of dealing with it. The terms of article 192 must be read in their context and in light of the object and purpose of the Convention.[179] Article 193,[180] like the preamble to the Convention,[181] indisputably reflects the need to reconcile the economic interests of States of exploiting natural resources with the requirements to protect and preserve the marine environment. States are therefore obliged to act for the better by developing an environmental risk management policy that allows these different interests to be taken into consideration, in accordance with their capabilities.[182]

146. It should also be recalled that in certain instances, the due diligence obligation implies adopting a precautionary approach,[183] not least in "situations where scientific evidence concerning the scope and potential negative impact of the activity in question is insufficient but where there are plausible indications of potential risks."[184] In the view of France, this is an important aspect to be taken into consideration when choosing measures to adopt to combat climate change, in particular those pertaining to the possible use of geoengineering techniques, as stated above with regard to the obligations to combat pollution.[185]

147. *Distinction between "protection" and "preservation" of the marine environment.* Article 192 of the Convention requires all States to "protect" and

[178] See, in particular, paras. 107 *et seq*. of the present written statement.
[179] See article 31, para. 1 of the Vienna Convention on the Law of Treaties.
[180] UNCLOS, article 193 (Sovereign right of States to exploit their natural resources): "States have the sovereign right to exploit their nature resources pursuant to their environmental policies and in accordance with their duty to protect and preserve the marine environment."
[181] UNCLOS, preambular paragraph 4: "Recognizing the desirability of establishing through this Convention, *with due regard for the sovereignty of all States*, a legal order for the seas and oceans which will *facilitate international communication*, and will *promote the peaceful uses of the seas and oceans, the equitable and efficient utilization of their resources*, the conservation of their living resources, and the study, protection and preservation of the marine environment". [Emphasis added].
[182] See, in particular, para. 113 of the present written statement.
[183] See, in particular, paras. 116-119 of the present written statement.
[184] *ITLOS Reports 2011*, *op. cit.*, p. 46, para. 131
[185] See, in particular, para. 116 on "geoengineering" of the present written submission.

"preserve" the marine environment. The juxtaposition of these two verbs, or of the words "protection" and "preservation" of the marine environment, which are found in other provisions of Part XII[186] and throughout the Convention,[187] implies that distinct obligations flow from them, failing which the *effet utile* of these provisions would partly be called into question. In the *South China Sea* case, the arbitral tribunal, referring to article 192, stated that "[t]his 'general obligation' extends both to 'protection' of the marine environment from future damage and 'preservation' in the sense of maintaining or improving its present condition."[188] According to this interpretation, the "preservation" of the marine environment thus goes beyond mere protection, since it implies that States must take appropriate measures to maintain or improve the present condition of the marine environment. "Protection", on the other hand, is more akin to an obligation to prevent damage in the face of a future threat or event, even if the obligation to protect the marine environment may, because of its continuous nature, also lead to the need to reduce or control such damage if it occurs. It is therefore primarily a criterion of temporality that makes it possible to distinguish between these two components of the obligation enshrined in article 192, but distinct specific obligations could also arise in connection with the impacts of climate change and ocean acidification.

148. *"Protection" of the marine environment focused on combating pollution.* With regard to the distinction between "protection" and "preservation", the anti-pollution measures provided for in Part XII of the Convention seem to fall more within the scope of the obligation to "protect" the marine environment in that they aim to "prevent" pollution, as well as to reduce and control it if it cannot be avoided.[189] Furthermore, article 21, paragraph 1, subparagraph f, of the Convention, which forms part of the context in which the other provisions of the Convention are to be interpreted,[190] provides that "[t]he coastal State may adopt laws and regulations […] relating to innocent passage through the territorial sea, in respect of all or any of the following:

[186] In addition to the title of Part XII, see articles 193, 194, paras. 5, 197, 202, 226; paras. 1 (b), 234, 235; paras. 1, 237 of UNCLOS.
[187] See preambular paragraph 4 and articles 56, para. 1 (b)(iii), 123 (b), 240 (d), 266 para. 2, 277 (c), 297 para. 1 (c) of UNCLOS.
[188] See PCA, Award of 12 July 2016, *op. cit.*, para. 941.
[189] See article 194 of UNCLOS and subquestion (a), paras. 99, 103 and 111, above, of the present written statement.
[190] According to the rule set out in article 31, para. 1 of the Vienna Convention on the Law of Treaties.

[…] the preservation of the environment of the coastal State and the prevention, reduction and control of pollution thereof". The fact that the prevention, reduction and control of pollution are distinguished here from the "preservation" of the environment means that, with regard to the other provisions where the latter term is used, combating pollution is to be considered *a contrario* as falling into the category of "protection" of the marine environment. The specific obligations of States to prevent, reduce and control pollution of the marine environment in relation to the deleterious effects that result or are likely to result from climate change, have already been discussed in the answer to the first part of the question referred to the Tribunal.

149. *Protection "beyond" pollution*. In examining the second part of the question referred to it, the Tribunal may have to determine whether other impacts of climate change, which would not fall within the definition of pollution, could give rise to specific obligations to protect the marine environment from a future threat. This scenario might occur, for example, were certain invasive species to move in response to ocean warming or changes in ocean currents. Article 196, paragraph 1, of the Convention specifies in this respect that "States shall take all measures necessary to prevent, reduce and control […] the intentional or accidental introduction of species, alien or new, to a particular part of the marine environment, which may cause significant and harmful changes thereto." Sea level rise, as a consequence of climate change, is another example of a threat to the marine environment, which can cause damage, especially at land-sea interfaces, which States must therefore prevent but also reduce and control, given the irreversible nature of rising water levels. Measures to improve the resilience of the marine and coastal environment include the reinforcement of coastal defences (jetties, dikes, dams, etc.) and nature-based solutions (preservation or restoration of wetlands, mangroves, salt marshes, seagrass meadows or coral reefs, thanks in particular to the reseeding of coral, which has the capacity to absorb carbon dioxide although is simultaneously threatened by climate change).

150. Consequently, since the causes of these climate change impacts are the same as those that can give rise to pollution of the marine environment in the strict sense, as referred to in the first part of the question put to the Tribunal, i.e., anthropogenic greenhouse gas emissions, the resulting obligation of prevention on States first and foremost entails the same need to control and reduce these emissions, not least by

fulfilling their obligations under the Paris Agreement so as to achieve the collective objective set out therein of limiting temperatures. Likewise, the same threshold required to prevent damage and a flexible and differentiated assessment of the means implemented, could apply here as well.[191] This is a due diligence obligation under which States must take the measures necessary to prevent or minimize these negative impacts – including through marine environmental impact assessments, the use of best available technologies, the application of the precautionary principle or approach, the adoption of appropriate rules and protective measures and the monitoring of their implementation by public and private operators – but are not required to achieve the desired result.[192]

151. *From "protection" to "preservation" of the marine environment*. If these other impacts of climate change on the marine environment cannot be avoided and continues over time, protection of the marine environment may require, as with pollution, reducing or controlling those impacts. The resulting specific obligations will then be similar to those arising from the obligation to "preserve" the marine environment – which means that States must take appropriate measures to maintain or improve the current state of the marine environment – but with the possible added need for its "restoration", insofar as its general state has been harmed. In other words, while the obligation to protect the marine environment from the effects of climate change essentially involves implementing mitigation measures (in particular by reducing greenhouse gas emissions), the obligation to preserve the marine environment is more likely to involve adaptation measures, which "restoration" would also probably necessitate.[193] "Protection" and "preservation", although complementary, are not completely isolated from each other either: if damage to the marine environment is unable to be prevented, the obligation to protect the marine environment will continue, with specific obligations comparable to those imposed by the obligation to preserve it, to which the obligation to "restore" the marine environment could be added. Such restoration thereby acquires a certain autonomy in relation to the "preventive" component of marine environmental protection. The content of these obligations will

[191] See the observations in part (a), paras. 108 *et s.*, above, of the present written statement.
[192] See, in particular, the observations in paras. 100-119, above, of the present written statement.
[193] While the term "restoration" is not used in UNCLOS, it is however mentioned in the EU Marine Strategy Framework Directive (directive 2008/56/CE of 17 June 2008).

then have to be guided by an ecosystem approach, characteristic of the objective to "preserve" the marine environment.

152. *Going beyond the anti-pollution approach with the ecosystem approach*. The overall wording used in article 192 (and repeated elsewhere in the Convention) therefore supposes that States must go beyond preventing pollution, in relation to climate change impacts and ocean acidification. While combating pollution is an important aspect of the obligation to "protect and preserve the marine environment", it is not the only aspect.[194] UNCLOS courts and tribunal have interpreted article 192 as including the preservation of biodiversity and, more broadly, marine ecosystems. As mentioned above, in the *Southern Bluefin Tuna* case, the Tribunal observed that "the conservation of the living resources of the sea is an element in the protection and preservation of the marine environment",[195] which the arbitral tribunal confirmed in the *South China Sea* case.[196] While sustainable fisheries management certainly helps to better "preserve" stocks and species from the impacts of fishing, the same is true in relation to climate change impacts and ocean acidification, especially as certain species are sometimes forced to migrate as a result. The Tribunal may have to identify a specific obligation in this respect, in particular in connection with the provisions of the convention on the conservation of fishery resources[197] as well as with those of specific agreements such as the New York Convention on Straddling Fish Stocks and Highly Migratory Fish Stocks,[198] which also advocates the ecosystem approach and the precautionary principle.[199]

153. Article 194, paragraph 5, of UNCLOS also gives a specific form to the general obligation enshrined in article 192 in the context of fragile ecosystems, which are particularly threatened by global warming and ocean acidification. This provision requires States to take "[t]he measures […] necessary to protect and preserve rare or

[194] See Award of 18 March 2015 in *Chagos Marine Protected Area (Republic of Mauritius* v. *United Kingdom of Great Britain and Northern Ireland),* RSA vol. XXXI, para. 320; See also PCA, Award of 12 July 2016, *op. cit.*, para. 945.
[195] *ITLOS Reports 1999*, *op. cit.*, p. 295, para. 70.
[196] See PCA, Award of 12 July 2016, *op. cit.*, p. 373, para. 956.
[197] See articles 61-67 relating to the EEZ, and 116-120 relating to the high seas.
[198] Agreement on 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 stock**s**, New York, 4 August 1995, United Nations, *Treaty Series*, vol. 2167, p. 3.
[199] *Ibid*., articles 5 and 6.

fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life." Furthermore, by simply stating that "the measures taken in accordance with this Part *shall include* those [mentioned above]",[200] it leaves the door open to the inclusion of other comparable situations of marine ecosystem degradation. In the *Chagos Marine Protected Area* case, the arbitral tribunal relied on this very provision to confirm that Part XII of the Convention is not confined to measures aimed strictly at combating marine pollution but extends to measures that primarily emphasize the conservation and preservation of ecosystems.[201] The obligation to preserve the marine environment thus fulfils a complementary function to that of protection because, in addition to preventing pollution, it requires States to adopt the measures necessary to deal with the systemic degradation of the marine environment.[202]

154. The following articles of the Convention which essentially concern pollution are, in this capacity, insufficient to guarantee an effective implementation of article 194, paragraph 5. Only articles 145 and 234 expressly refer to the "ecological balance" of the marine environment, the former concerning activities carried out in the Area and the latter being limited to ice-covered areas. For this reason, other options need to be considered to ensure the preservation of the marine environment, including the creation of marine protected areas (hereinafter "MPA"), which may also prove effective in relation to climate change impacts and ocean acidification, and will need to be rethought as to their scope and object in order to take account of these impacts. The new BBNJ Agreement, which in fact provides for the establishment of an institutional mechanism to create MPAs on the high seas, specifies that to achieve its objectives, the Parties must be guided by an "ecosystem approach" and an "approach that builds ecosystems resilience, *including to adverse effects of climate change and ocean acidification,* and also maintains and restores ecosystem integrity, including the carbon cycling services that underpin the ocean's role in climate".[203] The design and

[200] Emphasis added.
[201] See Award of 18 March 2015, *op. cit.*, para. 538. With regard to the interpretation of article 194, para. 5 in light of the CITES Convention, see also PCA, Award of 12 July 2016, *op. cit.*, para. 956.
[202] See, in particular, CBD, art. 8 (f): "Each Contracting Party shall, as far as possible and as appropriate: […] (f) Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, *inter alia*, through the development and implementation of plans or other management strategies"; and 8(h): "Prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species".
[203] BBNJ Agreement, article 5 (General principles and approaches), (e) and (g) (emphasis added).

management of these MPAs will therefore have to take into account climate change impacts, which could lead many species to migrate outside protected areas. Certain provisions of the Convention on Biological Diversity can also support this ecosystem approach to preserving the marine environment.[204]

155. *Obligation to cooperate.* As recalled above,[205] the obligation to cooperate, which is found in various provisions of the Convention but whose customary origin is otherwise well established, "is a fundamental principle in the prevention of pollution of the marine environment under Part XII of the Convention and general international law".[206] While the obligation to cooperate thus applies to combating pollution,[207] it also concerns more broadly the protection and preservation of the marine environment, as demonstrated by article 197 of the Convention ("Cooperation on a global or regional basis"). It provides that "*States shall cooperate* on a global basis and, as appropriate, on a regional basis, directly or through competent international organizations, in formulating and elaborating international rules, standards and recommended practices and procedures consistent with this Convention, *for the protection and preservation of the marine environment*, taking into account characteristic regional features."[208]

156. The obligation to cooperate thus makes it possible to implement the general obligation to protect and preserve the marine environment set out in article 192, well beyond combating pollution, even if it is mostly in the articles that follow that express this obligation in greater detail.[209] In that sense and as far as marine ecosystems are concerned, the obligation to cooperate echoes Principle 7 of the Rio Declaration on Environment and Development, according to which "States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the

[204] See, in particular, CBD, art. 8 (f): "Each Contracting Party shall, as far as possible and as appropriate: […] (f) Rehabilitate and restore degraded ecosystems and promote the recovery of threatened species, *inter alia*, through the development and implementation of plans or other management strategies"; and 8(h): "Prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species".
[205] See above para. 54 (observations subquestion (a) as well as paras. 120 *et s.* relating to the *obligation to cooperate* of the present written statement.
[206] As stated by the Tribunal in the *MOX Plant* case, *ITLOS Reports 2001*, *op. cit.*, p. 110, para. 82. See *ITLOS Reports 2003*, *op. cit.*, p.25, para. 92; as well as *ITLOS Reports 2015*, *op. cit.*, p. 43, para. 140.
[207] See also article 194, para.1 of UNCLOS.
[208] UNCLOS, article 197 (emphasis added).
[209] See, in particular, articles 207-212 of UNCLOS.

Earth's ecosystem."[210] This is of course particularly relevant in the context of climate change, given its global nature, as recalled in the preamble to the UNFCCC.[211]

157. Article 197 furthermore requires "characteristic regional features" to be taken into account. Insofar as climate change has a particular impact on certain regions such as the South Pacific and South-East Asia, or the Caribbean and the Arctic,[212] this requirement calls for special attention to be paid to the States concerned in the implementation of this cooperation, whether by involving them directly or by supporting them in their efforts to protect and preserve the marine environment. Article 197 of the Convention must also be read in conjunction with article 123, which provides that "States bordering an enclosed or semi-enclosed sea should cooperate with each other in the exercise of their rights and in the performance of their duties under this Convention" and, to that end, shall endeavour to "coordinate the implementation of their rights and duties with respect to the protection and prevention of the marine environment".[213] These two provisions are not mutually exclusive, but rather complementary, as the vulnerability of certain areas calls for enhanced cooperation, including stricter control and monitoring mechanisms.

158. The obligation to cooperate, which remains a due diligence obligation to be implemented in good faith by States,[214] has a dual character, since it is both procedural (in particular, sharing of information,[215] notification of damage,[216] development and

[210] Rio Declaration on Environment and Development, A/CONF.151/26 (Vol. I), 12 August 1992, Principle 7.
[211] UNFCCC, preamble: "[T]he global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their common but differentiated responsibilities and respective capabilities and their social and economic conditions".
[212] The vulnerability of polar areas is given consideration by article 234 of UNCLOS on "ice-covered areas" and refers also to the need to protect and preserve the marine environment in these areas.
[213] UNCLOS, art. 123 (b). Article 123 (a) also provides that these States shall endeavour "to coordinate the management, *conservation*, exploration and exploitation of the living resources of the sea" (emphasis added).
[214] *ITLOS Reports 2015*, *op. cit.*, p. 59, para. 210; and paras. 120 *et s.*, above, of the present written statement.
[215] Article 242, para. 2 of UNCLOS thus provides that "a State, in the application of this Part [Part XIII on marine scientific research], shall provide, as appropriate, other States with a reasonable opportunity to obtain from it, or with its cooperation, information necessary to prevent and control damage to the health and safety of persons and to the marine environment." See also article 200 on "studies, research programmes and exchange of information and data", and articles 204-206 on monitoring and environmental assessment, which require States to publish reports on the risks or effects of pollution of the marine environment and provide reports of the results obtained.
[216] Article 198 of UNCLOS provides that "[w]hen a State becomes aware of cases in which the marine environment is in imminent danger of being damaged or has been damaged by pollution, it shall immediately inform other States it deems likely to be affected by such damage, as well as the competent international organizations."

promotion of pollution contingency plans[217]) and substantive (in particular, definition of environmental protection rules[218] and appropriate scientific criteria for formulating them[219]). This cooperation can culminate in the conclusion of international agreements or scientific, technical or financial assistance to developing States, for example. While these mechanisms have already been addressed in the discussion on combating marine environment pollution,[220] they also concern other threats to the marine environment resulting from climate change, such as sea level rise, and more generally the "preservation" of marine ecosystems in light of its impacts.

159. In addition to the cooperation required to mitigate climate change, i.e., to reduce greenhouse gas emissions in line with the objectives of the UNFCCC and the Paris Agreement, States must also cooperate to adapt to disruptions in the marine environment when the impacts of climate change cannot be avoided. This cooperation regarding adaptation, whether scientific, technical or legal, is also urged by the Paris Agreement.[221] Whereas the UNFCCC has thus far focused on mitigation, the Paris Agreement places climate change mitigation, adaptation and finance on equal footing. Cooperation in this matter should therefore help bolster the resilience of marine ecosystems and help coastal communities face the challenges posed by climate change.

160. The instruments relating to the climate regime here again therefore give concrete effect to the obligation to cooperate in order to protect and preserve the marine environment, thereby helping to enrich and strengthen the Convention's regime. This is also true for the Convention's implementing agreements, which are a translation of this obligation to cooperate, while themselves promoting it again in their provisions – including with regard to the protection and preservation of the marine environment – and which likewise find application in the context of climate change and ocean acidification. Such agreements include the 1994 New York Agreement,[222] the 1995

[217] See article 199 of UNCLOS.
[218] See aforementioned article 197 of UNCLOS.
[219] See article 201 of UNCLOS.
[220] See subquestion (a), paras. 120 *et s.*, above, of the present written statement.
[221] See article 7 of the Paris Agreement.
[222] See section 5, para. 1 (c) of the New York Agreement of 28 July 1994 relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982.

Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks[223] and, more recently, the BBNJ Agreement, which takes into account the impacts of climate change to define area-based management tools (including marine protected areas that may be created through a global mechanism) as well as the modalities for implementing the obligation to conduct environmental impact assessments for activities taking place in international maritime areas that are likely to cause significant and harmful changes to the marine environment.

161. Lastly, it should be noted that while the due diligence obligation requires States to act within the limits of their possibilities and "according to their capabilities",[224] the obligation to cooperate applies equally to all States and must be implemented by all in good faith.[225]

[223] Article 7, para. 1 (a) and (b) and para. 5, the entire Part 3 on "Mechanisms for international cooperation concerning straddling fish stocks and highly migratory fish stocks", and other provisions on, for example, cooperation between developing States (article 25).
[224] *ITLOS Reports 2011*, *op. cit.*, p. 54, para. 161. See also the influence of the principle of equity and common but differentiated responsibilities in the UNFCCC (art. 3, para. 1) and the Paris Agreement (art. 4).
[225] UNCLOS, article 300; see also subquestion (a), paras. 120 *et s.*, above, of the present written submission.