INTERNATIONAL TRIBUNAL FOR THE LAW OF THE SEA

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

WRITTEN STATEMENT OF THE FEDERATED STATES OF MICRONESIA

16 JUNE 2023

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CHAPTER 1

REQUEST FOR AN ADVISORY OPINION

1. On 12 December 2022, the Commission of Small Island States on Climate Change and International Law ("COSIS"), an intergovernmental organization composed of several small island developing States¹ and constituted in accordance with the Agreement for the establishment of the Commission of Small Island States on Climate Change and International Law ("COSIS Agreement"),² submitted a request for an advisory opinion to the International Tribunal for the Law of the Sea ("Tribunal"). The request presents the following questions for consideration by the Tribunal:

"What are the specific obligations of State Parties to the United Nations Convention on the Law of the Sea ('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?"

- 2. On 16 December 2022, in Order 2022/4, the Tribunal agreed to initiate advisory proceedings in response to the request from COSIS. Furthermore, as stated in the same Order, the Tribunal invited the States Parties to the 1982 United Nations Convention on the Law of the Sea ("Convention"), COSIS, and a number of intergovernmental organizations listed in an annex to the same Order to present written statements on the questions submitted by COSIS to the Tribunal for an advisory opinion.
- 3. The Tribunal has already determined that it is has jurisdiction to issue advisory opinions as a full Tribunal as a general matter.³ The Federated States of Micronesia ("FSM") will nevertheless revisit that general determination for the purpose of the request from COSIS in the present Case No. 31.

¹ At the time of submission of the request, the membership of COSIS consisted of Antigua and Barbuda, Tuvalu, and Palau. Since the submission, instruments of accession have been deposited by Niue, St. Lucia, and Vanuatu. ² Agreement for the Establishment of the Commission of Small Island States on Climate Change and International Law art. 1(1), Oct. 31, 2021, U.N. Registration No. 56940 [hereinafter COSIS Agreement].

³ See Request for Advisory Opinion Submitted by the Sub-Regional Fisheries Commission, Advisory Opinion, Case No. 21, April 2, 2015, ITLOS Reports 2015, p. 4, at ¶ 69 [hereinafter Case No. 21].

CHAPTER 2

JURISDICTION AND DISCRETION

- 4. The Convention authorizes the Seabed Disputes Chamber of the Tribunal to issue advisory opinions when certain requirements are met.⁴ The Seabed Disputes Chamber is a smaller grouping of Tribunal judges that adjudicate cases regarding the exploration and exploitation of the international seabed Area; the Seabed Disputes Chamber is not the full Tribunal. Indeed, the Convention does not explicitly authorize the full Tribunal to issue advisory opinions.
- 5. However, Article 21 of the Statute of the Tribunal provides that the jurisdiction of the Tribunal includes all "disputes" submitted to the Tribunal in accordance with the Convention; all "applications" submitted to the Tribunal in accordance with the Convention; and all "matters" specifically provided for in any other agreement that confers advisory jurisdiction on the Tribunal.⁵ Additionally, Article 138(1) of the Rules of the Tribunal provides that the Tribunal "may give an advisory opinion on a legal question if an international agreement related to the purposes of the Convention specifically provides for the submission to the Tribunal of a request for such an opinion."⁶
- 6. In light of the foregoing (among other considerations), the Tribunal determined in Case No. 21 that the Tribunal can exercise its advisory jurisdiction as a full Tribunal if three prerequisites are satisfied: "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 an opinion may be given on 'a legal question.'"⁷ On that basis, the Tribunal further determined that it had jurisdiction to issue an advisory opinion in the same Case No. 21, and consequently proceeded to issue the opinion.
- 7. In the present matter, in accordance with Case No. 21, the Tribunal must determine whether the COSIS Agreement is an international agreement related to the purposes of the Convention that specifically provides for the submission to the Tribunal of the present request for an advisory opinion; whether the transmittal of the present request to the Tribunal is by a body authorized by or in accordance with the COSIS Agreement; and whether the present request contains a legal question or questions that the requested advisory opinion will answer.
- 8. The present request by COSIS satisfies the prerequisites identified in Case No. 21 for the Tribunal to exercise its advisory jurisdiction as a full Tribunal. The request presents

⁴ United Nations Convention on the Law of the Sea art. 191, Dec. 10,1982, 1833 U.N.T.S. 397 [hereinafter Convention].

⁵ Statute of the International Tribunal for the Law of the Sea at art. 21 [hereinafter Tribunal Statute].

⁶ Rules of the International Tribunal for the Law of the Sea at art. 138(1) [hereinafter Tribunal Rules].

⁷ Case No. 21, *supra* note 3, at ¶ 60.

questions on the legal obligations of States Parties under the Convention, including Part XII thereof, pertaining to the prevention, reduction, and control of pollution of the marine environment as well as the protection and preservation of the marine environment. The request was submitted by COSIS pursuant to the COSIS Agreement. The COSIS Agreement specifically authorizes COSIS to submit a request to the Tribunal for an advisory opinion.⁸ Finally, the COSIS Agreement is related to the purposes of the Convention. Article 1(3) of the COSIS Agreement specifies that "[t]he mandate of [COSIS] shall be to promote and contribute to the definition, implementation, and progressive development of rules and principles of international law concerning climate change, including, but not limited to, the obligations of States relating to the protection and preservation of the marine environment and their responsibility for injuries arising from internationally wrongful acts in respect of the breach of such obligations".⁹ Similarly, the preamble of the COSIS Agreement "[a]cknowledg[es] the importance of maritime zones and the significant reliance of Small Island States on marine living resources within such zones, as well as the impacts of climate change on the marine environment including marine living resources,"¹⁰ as well as "[a]ffirm[s] that maritime zones, as established and notified to the Secretary-General of the United Nations in accordance with the 1982 United Nations Convention on the Law of the Sea, and the rights and entitlements that flow from them, shall continue to apply, without reduction, notwithstanding any physical changes connected to climate change-related sea-level rise."¹¹ The protection and preservation of the marine environment; the safeguarding of marine living resources for the economic development of coastal States with sovereignty, sovereign rights, and jurisdiction pertaining to those resources; and the establishment and maintenance of maritime zones are all related to the purposes of the Convention, even without the added element of the impact of climate change and related effects of anthropogenic greenhouse gas emissions on such matters.

9. The FSM acknowledges that the Tribunal has the discretion as to whether to give a requested advisory opinion, even if the request meets all relevant requirements for the Tribunal's advisory jurisdiction. However, the Tribunal acknowledged in its Case No. 21 that a request for an advisory opinion "should not in principle be refused except for 'compelling reasons."¹² In examining various factors of possible relevance to the issue of discretion in the same Case No. 21, the Tribunal underscored that an advisory opinion "may be given 'on any legal question, abstract or otherwise",¹³ clarified that the issuance of an advisory opinion does not necessarily involve the Tribunal playing a legislative role beyond its judicial functions;¹⁴ and pronounced that the consent of third States that are not members of the entity requesting the advisory opinion is not relevant as to whether

¹⁴ Id., at ¶ 74.

⁸ COSIS Agreement, supra note 2, at art. 2(2).

⁹ Id., at art. 1(3).

¹⁰ Id., at preamble.

¹¹ Id.

¹² Case No. 21, *supra* note 3, at ¶ 71, citing Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, I.C.J. Reports 1996, p. 226, at p. 235, ¶ 14.

¹³ Id., at ¶ 72, citing Conditions of Admission of a State to Membership in the United Nations (Article 4 of the Charter), Advisory Opinion, 1948, I.C.J. Reports 1947-1948, p. 57, at p.61.

the Tribunal should give the requested advisory opinion, given the focus of the request on assisting the requesting entity.¹⁵

10. In the present Case No. 31, in light of its examination in its Case No. 21, the Tribunal has no "compelling reasons" to decide not to give the requested advisory opinion. The questions in the request from COSIS are of a legal nature, as indicated above, and their possibly abstract nature has no bearing on this determination (indeed, all requests for advisory opinions are by their very nature necessarily abstract to a certain degree). To render the requested opinion, the Tribunal would undertake a judicial examination of relevant existing international law; the questions do not require the Tribunal to create new law or perform some other legislative function. Finally, although membership in COSIS appears to be limited to members of the Alliance of Small Island States,¹⁶ this has no bearing on whether the Tribunal should exercise its discretion to give the requested advisory opinion, given that the consent of third States that are not members of the Alliance of Small Island States is not relevant to the Tribunal's advisory jurisdiction as a general matter.

¹⁵ Id., at ¶ 76.

¹⁶ COSIS Agreement, supra note 2, at art. 3(1-2).

CHAPTER 3

APPLICABLE LAW

- 11. Pursuant to Article 138(3) of the Rules of the Tribunal, when giving an advisory opinion, the Tribunal must apply *mutatis mutandis* the provisions of the Rules regulating the issuing of advisory opinions by the Seabed Disputes Chamber.¹⁷ Those Rules include Article 130(1), which states that the Seabed Disputes Chamber "shall . . . be guided, to the extent to which it recognizes them to be applicable, by the provisions of the Statute" of the Tribunal.¹⁸
- 12. The Statute of the Tribunal is contained in Annex VI of the Convention. According to Article 38 of the Statute, the Seabed Disputes Chamber (and, by extension, the Tribunal), when crafting a validly requested advisory opinion, must apply the provisions of Article 293 of the Convention.¹⁹ Article 293(1) of the Convention states that "[a] court or tribunal having jurisdiction under this section shall apply the Convention and other rules of international law not incompatible with the Convention."²⁰
- 13. Thus, it is the intent of the FSM, when submitting its views on the questions in the present Case No. 31, to highlight and discuss provisions of the Convention; other multilateral, regional, and subregional agreements and arrangements that are not incompatible with the Convention; and other rules of international law not incompatible with the Convention, including norms of customary international law as well as general principles of law. The FSM expects the Tribunal to do the same in its eventual advisory opinion in the present Case.

¹⁷ Tribunal Rules, *supra* note 6, at art. 138(3).

¹⁸ Id., at art. 130(1).

¹⁹ Tribunal Statute, *supra* note 5, at art. 38.

²⁰ Convention, *supra* note 4, at art. 293(1).

CHAPTER 4

OBSERVATIONS ON THE QUESTIONS

14. Before presenting its observations on the questions to be addressed by the Tribunal, the FSM wishes to make a number of general comments on matters pertinent to the present advisory proceedings, as well as preliminary observations about the questions presented in the proceedings.

General comments

- 15. The FSM is a small island developing State that has sovereignty, sovereign rights, and jurisdiction under the Convention over nearly three million square kilometers of the Pacific Ocean, inclusive of the marine biological diversity and resources therein (living and non-living). As a maritime nation with longstanding economic, social, and cultural connections to and reliance on the Ocean, its biological diversity, and its resources, the FSM places particular importance on the orderly, equitable, and lawful management of the Ocean by all members of the international community, in accordance with the Convention and all other relevant international law not incompatible with the Convention. As a small island developing State, however, the FSM recognizes that the international legal order struggles with interpreting and implementing the Convention and other relevant international law in a manner that acknowledges the unique challenges faced by small island developing States, which is a grouping of States that is not explicitly referenced in the Convention but have become more prominent in multiple intergovernmental processes and multilateral legally binding agreements since the adoption of the Convention.
- 16. Such challenges are thrown into particular relief as a result of rampant anthropogenic greenhouse emissions leading to climate change and Ocean acidification. For the FSM, current projections see the FSM experiencing up to 2.1 to 4 degrees Celsius of warming by 2090, with every year since 2000 having been warmer in the FSM than the pre-industrial average for the same area and the temperature rising at a faster rate overall in recent decades in the FSM region.²¹ Sea-level rise in the FSM region is projected to potentially be as high as 1.23 meters by the end of the 21st century,²² putting at existential risk communities living on low-lying islands and atolls, as well as low-lying coastal areas in "high" volcanic islands, throughout the FSM. While tropical cyclone / typhoon incidence might decrease as a total number in the FSM region as the region warms, the incidence of *severe* (category 4 or 5) tropical cyclones / typhoons will likely increase, and so will the average *intensity* of the tropical cyclones / typhoons that do occur.²³ Due to

²¹ 'NextGen' Projections for the Western Tropical Pacific: Current and Future Climate for Federated States of Micronesia. Final report to the Australia-Pacific Climate Partnership for the Next Generation Climate Projections for the Western Tropical Pacific project, p. 2. Commonwealth Scientific and Industrial Research Organization (CSIRO) and Secretariat of the Pacific Regional Environment Programme (SPREP) 2021, accessible at https://doi.org/10.25919/tjwo-j296.

²² Id., at p. 21.

²³ Id., at p. 19.

Ocean acidification, it is projected that the FSM region could experience severe coral bleaching on an annual basis by 2038.²⁴ Finally, the maximum fisheries catch potential for the FSM region could decline by 50 percent by 2050.²⁵

- 17. The FSM is also part of a large political and legal grouping of Pacific Island countries and territories ("PICTs") controlling over 27 million square kilometers of the maritime space, or approximately eight percent of the global Ocean; and all of whom are States Parties to the Convention or accept the Convention as largely reflecting customary international law.²⁶ While the various harmful effects of anthropogenic greenhouse gas emissions referenced above for the FSM apply in kind to the rest of the PICTs, Ocean acidification deserves particular mention, given its impacts on marine biological diversity in the PICTs region as well as the ability of PICTs to exploit or otherwise manage and enjoy such biological diversity, including in accordance with the Convention and other relevant international law.
- 18. The region covered by the PICTs encompasses more than a quarter of the world's coral reefs, with 11 PICTs having at least twice as much coral reef coverage as land.²⁷ Nearly half of coral reef islands among the PICTs are considered threatened from various stressors, with a fifth of them classified as highly or very highly threatened.²⁸ The major stressors are primarily overfishing and coastal infrastructure development at present, but Ocean acidification is projected to worsen such stressors as well as contribute as its own stressor for PICTs. Specifically, by mid-century, the tropical Pacific will likely have less than 15 percent of coral reef area that is at least adequate for coral growth (i.e., aragonite saturation levels no lower than 3.5), with some parts of the region having no more than marginal prospects (i.e., aragonite saturation states less than 3).²⁹ In such weakened

²⁴ Pacific 'NextGen' Projections Digital Digest, p. 22, accessible at https://www.rccap.org/uploads/files/aaa60215-85fd-4020-891c-64c40cb9f0e7/NextGen%20Digital%20Digest_Updated.pdf. ²⁵ Id.

²⁶ There are 22 Pacific Island countries and territories ("PICTs") in this grouping. 14 of those PICTs are independent Pacific Island countries that traditionally coordinate as a group called the Pacific Small Island Developing States ("PSIDS") in various Ocean-related multilateral fora (e.g., the United Nations Framework Convention on Climate Change, the Convention on Biological Diversity). Those fourteen PSIDS are: Cook Islands, the Federated States of Micronesia, Fiji, Kiribati, the Marshall Islands, Nauru, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu. All of them are States Parties to the Convention. The remaining 8 PICTs are: American Samoa, Commonwealth of the Northern Mariana Islands, French Polynesia, Guam, New Caledonia, Pitcairn Islands, Tokelau, and Wallis and Futuna. These remaining PICTs are territories or are otherwise similarly classified as linked to (if not part of) other countries (i.e., the United States of America, France, New Zealand, and the United Kingdom), as opposed to being independent Pacific Island countries, but the countries with colonial authority over them are all States Parties to the Convention or (in the case of the United States of America) accept the Convention as largely reflecting customary international law.

²⁷ Specifically, the PICTs are Cook Islands, Federated States of Micronesia, French Polynesia, Kiribati, Marshall Islands, Palau, Pitcairn Islands, Tokelau, Tonga, Tuvalu, and Wallis & Futuna. Johann Bell, et al., Vulnerability of tropical Pacific fisheries and aquaculture to climate change: Summary for Pacific island countries and territories, Secretariat of the Pacific Community (2011) [hereinafter Bell 2011].

²⁸ Lauretta Burke, Katie Reytar, Mark Spalding, and Allison Perry, Reefs at risk revisited, World Resources Institute (2011). 29

Andrew Lenton, Kathleen Mcinnes, and Julian O'Grady, Marine Projections of Warming and Ocean Acidification in the Australasian Region, 65 AUSTRALIAN METEOROLOGICAL AND OCEANOGRAPHIC JOURNAL S1-S28 (2015).

conditions, coral reefs will be particularly vulnerable to other stressors such as coral bleaching that are also caused by excess anthropogenic greenhouse gas emissions.³⁰

- 19. Ocean acidification weakens coral reef systems, which are the primary habitats of reef fish.³¹ Additionally, Ocean acidification may disrupt olfactory cues used by reef fish to locate their habitats and avoid predators.³² Relatedly, shellfish such as oysters and giant clams that are commercially viable in the Pacific are directly impacted by Ocean acidification due to poor conditions for shell production.³³
- 20. Fish and shellfish are essential for food security for PICTs. Fish provides anywhere from half to nearly all of animal protein for populations in PICTs, with fish consumption per person in some PICTs being at least three times greater than the global average.³⁴ In 17 PICTs, nearly half of all households earn their primary or secondary incomes from subsistence fishing.³⁵ Demersal (i.e., bottom-dwelling) fisheries make up approximately 50 to 60 percent of coastal fisheries among the PICTs. Demersal fisheries are strongly dependent on healthy coral reef systems and are considered to be particularly vulnerable to Ocean acidification.
- 21. Tuna fisheries are also of particular interest for PICTs, given how dependent the economies and food security of many PICTs are on their exploitation.³⁶ Ocean acidification will likely affect tuna fisheries by disrupting the food webs for tuna in a number of ways. Specifically, phytoplankton and zooplankton will find it more challenging to make use of aragonite in the Ocean to build their skeletons,³⁷ and the increased absorption of carbon dioxide by the Ocean will worsen oxygen levels in the Ocean and harm deep Ocean organisms that depend on oxygen (and on which tuna feeds).

JOURNAL OF MARINE SCIENCE 414-432 (2008).

³⁰ K. J. Meissner, T. Lippmann, and A. Sen Gupta, *Large-scale stress factors affecting coral reefs: Open ocean sea surface temperature and surface seawater aragonite saturation over the next 400 years*, 31 CORAL REEFS 309-319 (2012). See also Ruben van Hooidonk, Jeffrey Allen Maynard, Derek Manzello, and Serge Planes, *Opposite latitudinal gradients in projected ocean acidification and bleaching impacts on coral reefs*, 20 GLOBAL CHANGE BIOLOGY 103-112 (2014).

³¹ Morgan S. Pratchett et al., *Vulnerability of coastal fisheries in the tropical Pacific to climate change, in* Bell 2011, *supra* note 27, at 493-576.

 ³² Philip Munday et al., Ocean acidification impairs olfactory discrimination and homing ability of a marine fish,
 106 PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES 1848-1852 (2009) [hereinafter Munday]; see also
 Danielle Dixson, Philip Munday, and Geoffrey Jones, Ocean acidification disrupts the innate ability of fish to detect
 predator olfactory cues, 13 ECOLOGY LETTERS 68-75 (2010).
 ³³ Kristy Kroeker et al., Impacts of ocean acidification on marine organisms: quantifying sensitivities and

³³ Kristy Kroeker et al., *Impacts of ocean acidification on marine organisms: quantifying sensitivities and interaction with warming*, 19 GLOBAL CHANGE BIOLOGY 1884-1896 (2013).

³⁴ Johann Bell et al., *Planning the use of fish for food security in the Pacific*, 33 MARINE POLICY 64-76 (2009); see also Johann Bell et al., *Implications of climate change for contributions by fisheries and aquaculture to Pacific Island economics and communities*, in VULNERABILITY OF TROPICAL PACIFIC FISHERIES AND AQUACULTURE TO CLIMATE CHANGE (Johann Bell et al., eds., 2011).

³⁵ Status report: Nearshore and reef fisheries and aquaculture, Secretariat of the Pacific Community (2008), available at www.spc.int/DigitalLibrary/Doc/FAME/Reports/Anon_08_FisheriesStatusReport.pdf.

 ³⁶ Johann Bell and Mary Taylor, Building climate-resilient food systems for Pacific Islands, WorldFish (2015).
 ³⁷ Victoria J. Fabry et al., Impacts of ocean acidification on marine fauna and ecosystem processes, 65 ICES

- 22. Although scientific research remains relatively sparse, there are preliminary indications of direct effects of Ocean acidification on tuna, including the skipjack, yellowfin, bigeye, and albacore species of particular economic value for PICTs. Specifically, there are indications that declining Ocean pH may lead to major reductions in the survivability of yellowfin tuna larvae,³⁸ lower rates of tuna egg production,³⁹ and disruptions in the spatial orientation and hearing capabilities of tuna.⁴⁰
- 23. The impacts of climate change and Ocean acidification on the PICTs region as a whole have particular resonance for the FSM. The FSM's collective maritime area is one of the largest and most productive in the Western and Central Pacific Ocean. The FSM depends heavily on its fisheries for income and food security; marine fisheries comprise 80% of the FSM's total exports and provide approximately 110kg of protein consumption per capita in the FSM, a remarkably high number compared to the consumption patterns of most other countries. Of particular importance for the FSM is the exploitation and management of tuna stocks in the FSM's waters; the vast majority of the fisheries activities in the FSM's waters target tuna, bringing in approximately 150,000 tonnes in annual catch.

Preliminary observations on the questions presented

- 24. For the present written statement, the FSM acknowledges that both questions i.e., question (a) and question (b) presented in the request by COSIS for an advisory opinion are meant to be addressed in accordance with the overall chapeau of the request, i.e., with respect to the specific obligations of States Parties to the Convention, including under Part XII thereof, to address the matters in the two questions. States Parties to the Convention, including its Part XII; but also under customary international law and other rules of international law, assuming that such rules of international law are not incompatible with the Convention where the Convention is *lex specialis*. In this regard, attention is drawn to the final preambular paragraph of the Convention, which "[a]ffirm[s] that matters not regulated by this Convention continue to be governed by the rules and principles of general international law."⁴¹
- 25. The FSM acknowledges that for the present Case No. 31, the Tribunal might consider engaging in some degree of evidentiary or factual determination pertaining to the harmful effects of anthropogenic greenhouse gas emissions on the marine environment, including an assessment of the relevant science, knowledge, and information, given the complex technical nature of the matter. The FSM notes that in the Tribunal's advisory opinions in Case No. 21 as well as (via the Seabed Disputes Chamber of the Tribunal) in Case No. 17, the Tribunal did not formally engage in evidentiary or factual determinations, so there exists some degree of paucity in the Tribunal's handling of such determinations with

³⁸ Don Bromhead et al., *The potential impact of ocean acidification upon eggs and larvae of yellowfin tuna* (Thunnus albacares), 113 DEEP SEA RESEARCH II 268-279 (2015).

³⁹ Hans Pörtner and Anthony Farrell, Physiology and climate change, 322 SCIENCE 690-692 (2008).

⁴⁰ Munday, *supra* note 32.

⁴¹ Convention, *supra* note 4, at preamble.

respect to advisory proceedings. In this regard, the FSM encourages the Tribunal to refrain in the present Case No. 31 from making any determinations on its own as to the relative weighting of different science, knowledge, and information pertaining to anthropogenic greenhouse gas emissions and their effects on the marine environment. The Tribunal can adopt, without engaging in any weighting of its own, the relevant findings and conclusions of reputable entities and esteemed experts in the field, including those cited in paragraphs 16 to 23 of the present written statement as well as more generally those from, *inter alia*, the Intergovernmental Panel on Climate Change; the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services; and the United Nations Regular Process for Global Reporting and Assessment of the States of the Marine Environment, including Socioeconomic Aspects. This will ensure that the Tribunal focuses on the identification of the relevant legal obligations in the present Case No. 31 rather than engage in extensive evidentiary or factual determinations (which, in any event, is unnecessary to render the requested advisory opinion).

- 26. Alternatively, if the Tribunal considers it necessary to engage in some form of its own evidentiary or factual determination, such as weighing competing expert evidence on scientific matters, the FSM encourages the Tribunal to take a limited approach in line with that taken by the International Court of Justice in advisory proceedings, specifically, a determination that the Tribunal has before it "sufficient information and evidence to enable it to arrive at a judicial conclusion upon any disputed questions of fact the determination of which is necessary for it to give an opinion in conditions compatible with its judicial character."⁴² Additionally, the Permanent Court of International Justice, as the predecessor of the International Court Justice, noted that "under ordinary circumstances, it is certainly expedient that the facts upon which the opinion of the Court is desired should not be in controversy, and it should not be left to the Court itself to ascertain what they are."43 In line with the approaches taken above, it is the FSM's submission that there is no genuine dispute as to the relevant science, knowledge, and information pertaining to the harmful effects of anthropogenic greenhouse gas emissions on the marine environment, including climate change and Ocean acidification, at least to the extent necessary to allow the Tribunal to render an advisory opinion requested in the present Case No. 31. Additionally, the Tribunal should avoid lending disproportional credence (if any) to alleged disputations of facts and evidence raised in the present Case No. 31, given the highly technical nature of the established research into anthropogenic greenhouse gas emissions and the inappropriateness of the Tribunal engaging in the ascertainment of such facts and evidence as the expert body of first instance.
- 27. In light of the above, the FSM will not engage in the present written statement in any exercise of evidentiary or factual determinations pertaining to anthropogenic greenhouse gas emissions, but will instead rely with favor on citations to the reputable entities and esteemed experts such as those referenced in paragraph 25 above.

⁴² Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965, Advisory Opinion, I.C.J. Reports 2019, p. 95, at ¶ 71, citing Western Sahara, Advisory Opinion, I.C.J. Reports 1975, p. 12, at pp. 28-29 (emphasis added).

⁴³ Status of Eastern Carelia Case, Advisory Opinion, Permanent Court of Justice, P.C.I.J. Series B. No. 5, July 23, 1923 at p. 28.

- 28. The FSM also notes, with approval, that the questions presented in the request from COSIS make a distinction between climate change on the one hand, and Ocean acidification on the other hand. The FSM supports this distinction. Ocean acidification is not a subset of climate change. Rather, climate change and Ocean acidification share the same root cause i.e., anthropogenic greenhouse gas emissions while being distinct phenomena with differentiated impacts on the environment, particularly the marine environment.
- 29. Finally, the FSM notes that the chapeau of the question presented in the request from COSIS refers to "State Parties" to the Convention. However, the Convention uses the terminology of "States Parties" when referring to the plural. The FSM will use "States Parties" in all relevant parts of the present written statement rather than "State Parties."

Question 1

"What are the specific obligations of State[s] Parties to the United Nations Convention on the Law of the Sea (the 'UNCLOS'), including under Part XII, 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?"

Pollution of the marine environment

30. Article 1(1)(4) of the Convention defines "pollution of the marine environment" for purposes of the Convention as:

the 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 amenities⁴⁴

- 31. Although not explicitly referenced, anthropogenic greenhouse gas emissions qualify as "pollution of the marine environment" under the Convention's definition. Specifically, anthropogenic greenhouse gas emissions e.g., carbon dioxide are "source[s]" of "substances" or "energy" that are "introduced by man, directly or indirectly . . . into the marine environment." Such emissions, including those released through humanity's burning of fossil fuels (on land, at sea by vessels, and in the air by aircraft) and the conducting of certain industrial and agricultural processes (e.g., cement factory production and land-clearing for mono-cropping, respectively), trap heat energy in the Earth's atmosphere through the greenhouse effect, which in turn redirects much of that heat energy into the marine environment in particular. Additionally, carbon dioxide emissions also make their way directly into the marine environment, separate from the heat energy thermal transfer. Thus, the actions of humanity lead at least indirectly to the introduction of heat energy into the marine environment as well as directly to the infusion of carbon dioxide into the same marine environment.
- 32. Furthermore, such introduction of heat energy and carbon dioxide into the marine environment "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." As discussed above,⁴⁵ climate change and Ocean acidification, as the results of excessive anthropogenic greenhouse gas emissions, are at the very least *likely* to produce harmful effects to living resources and marine life, such as

⁴⁴ Convention, *supra* note 4, at art. 1(1)(4).

⁴⁵ See paras 16-22, supra.

through coral bleaching, the stunting of the growth of various fish species, disruptions in the life cycles of various shellfish, loss of marine species and habitats due to Ocean warming, and destruction of marine habitats through severe tropical cyclones / typhoons. Additionally, sea-level rise - as a consequence of anthropogenic greenhouse gas emissions – poses hazards to the health of human communities in coastal areas that are inundated by rising seas, imperiling food and water sources and living spaces therein. Sea-level rise also inundates coastal wetlands situated in and/or contiguous to estuaries, which are explicitly referenced as elements of the marine environment being polluted in article 1(1)(4) of the Convention. Furthermore, climate change and Ocean acidification hinder a number of marine activities of importance to coastal communities (among others), including those of the FSM and other small island developing States, such as commercial and subsistence fisheries (with key fish stocks moving away from their normal grounds due to warming Ocean currents/spaces, as well as reduced coral coverage for feed), aquaculture (which is dependent on stable pH levels in the Ocean and the presence of certain marine life as feed stocks), and ecotourism (such as recreational snorkeling, undermined by coral bleaching and lower levels of reef fish, as well as whale spotting, undermined by warming Ocean currents shifting migratory patterns).

33. Part XII of the Convention addresses, in a fairly comprehensive manner, obligations pertaining to the protection and preservation of the marine environment. Article 192 of the Convention codifies the general duty of States under international law in relation to the marine environment stating, "States have the obligation to protect and preserve the marine environment."⁴⁶ The next major section of the present written statement will address this obligation more generally as a response to Question 2 in the request submitted by COSIS. With particular regard to the pollution of the marine environment, Part XII addresses this to a significant (but non-exclusive) degree in article 194 of the Convention, which states in relevant parts:

1. 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*, using for this purpose the best practicable means at their disposal and in accordance with their capabilities, and they shall endeavour to harmonize their policies in this connection.

2. 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 this Convention.

3. The measures taken pursuant to [Part XII of the Convention] shall deal with *all* sources of pollution of the marine environment. These measures shall include, *inter alia*, those designed to minimize to the fullest possible extent:

⁴⁶ Convention, *supra* note 4, at art. 192.

(a) the release of toxic, harmful or noxious substances, especially those which are persistent, *from land-based sources, from or through the atmosphere* or by dumping;

(b) *pollution from vessels*, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, preventing international and unintentional discharges, and regulating the design, construction, equipment, operation and manning of vessels; (c) *pollution from installations and devices used in exploration or exploitation of the nature resources of the seabed and subsoil*, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, and regulating the design, construction, equipment, operations at sea, and regulating the design, construction, equipment, operations at sea, and regulating the installations or devices;

(d) *pollution from other installations and devices operating in the marine environment*, in particular measures for preventing accidents and dealing with emergencies, ensuring the safety of operations at sea, and regulating the design, construction, equipment, operation and manning of such installations or devices.

4. In taking measures to prevent, reduce or control pollution of the marine environment, States shall refrain from unjustifiable interference with activities carried out by other States in the exercise of their rights and in pursuance of their duties in conformity with this Convention.

5. The measures taken in accordance with this Part shall include those *necessary* to protect and preserve rare or fragile ecosystems as well as the habitat of depleted, threatened or endangered species and other forms of marine life.⁴⁷

- 34. Article 195 of the Convention requires that when States take measures to prevent, reduce and control pollution of the marine environment, those 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."⁴⁸
- 35. Article 196 of the Convention obligates States, in part, to take all measures necessary to prevent, reduce and control pollution of the marine environment "resulting from the use of technologies under their jurisdiction or control."⁴⁹
- 36. Articles 207, 208, 209, 211, 212, 217, 218, 220, and 222 of the Convention, among others, expand on the overarching obligations in article 194 of the Convention with respect to pollution of the marine environment from or through land-based sources, seabed activities within national jurisdiction, activities in the international seabed Area, vessels at sea, and the atmosphere, including enforcement actions by flag States, port States, and coastal States, as appropriate. Several of these provisions including articles

⁴⁷ Id., at art. 194 (emphases added).

⁴⁸ Id., at art. 195.

⁴⁹ Id., at art. 196.

207(1), 207(4), 208(3), 208(5), 211(1), 211(2), 212(1), and 212(3) – make clear that in order to discharge such obligations, States must not only implement domestic laws, regulations, and other measures, but also take into account and/or adopt laws, regulations, and other measures that are no less effective than existing internationally agreed rules, standards, and recommended practices and procedures; as well as work through competent international organizations or treaty-making processes (i.e., diplomatic conference) to establish new global and regional rules, standards, and recommended practices and procedures to prevent, reduce, and control pollution of the marine environment.

- 37. In addition to imposing general substantive obligations on States with respect to preventing, reducing, and controlling pollution of the marine environment, Part XII of the Convention contains a number of provisions imposing what are essentially procedural obligations on States. For example, article 198 imposes a duty of immediate notification by a State to other States when the marine environment "is in imminent danger of being damaged or has been damaged by pollution."⁵⁰ Article 199 obligates States to "jointly develop and promote contingency plans for responding to pollution incidents in the marine environment."⁵¹ Article 200 requires States to, *inter alia*, cooperate in "promoting studies, undertaking programmes of scientific research and encouraging the exchange of information and data acquired about pollution of the marine environment."52
- 38. Articles 204, 205, and 206 of the Convention straddle the spheres of substantive and procedural obligations. The three articles address, inter alia, the monitoring by States of the risks or effects of pollution of the marine environment;⁵³ the publication by States of reports on the results of such monitoring;⁵⁴ and the conducting of assessments by States of the potential effects of planned activities under the jurisdiction or control of such States that may cause "substantial pollution" to the marine environment (essentially, conduct environmental impact assessments), along with the communication of reports on the results of such assessments.⁵⁵ The obligation to monitor the risks or effects of pollution of the marine environment, as well as the obligation to conduct assessments of the potential effects of planned activities that may cause "substantial pollution" to the marine environment, are substantive obligations imposed on States by the Convention; whereas the obligation to publish or otherwise communicate relevant reports on the monitoring of effects as well as the results of assessments is a procedural obligation.

Obligation of due diligence

39. The abovementioned provisions from Part XII of the Convention, taken together and as a whole, establish an obligation of due diligence for States Parties to the Convention to prevent, reduce, and control pollution of the marine environment. To the extent that such

⁵³ Id., at art. 204.

⁵⁰ Id., at art. 198.

⁵¹ Id., at art. 199.

⁵² Id., at art. 200.

⁵⁴ Id., at art. 205. ⁵⁵ Id., at art. 206.

pollution of the marine environment includes climate change and Ocean acidification, that same obligation of due diligence applies with respect to efforts by States Parties to the Convention to prevent, reduce, and control anthropogenic greenhouse gas emissions that result in pollution of the marine environment. This includes anthropogenic greenhouse gas emissions from and/or through, *inter alia*, land-based sources (e.g., power plants, industrial factory production, motor vehicle transportation), seabed activities within national jurisdiction (e.g., disturbance of greenhouse gas deposits in the seabed such as methane and carbon dioxide), activities in the international seabed Area (similar concerns about disturbance of greenhouse gas deposits in the seabed activities within national jurisdiction), vessels at sea (e.g., cargo transport, cruise liners), and the atmosphere (e.g., commercial aircraft, satellites and their launch vehicles).

- 40. The notion of due diligence under international law has been examined in a number of fora. For example, Article 3 of the Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, which were adopted by the International Law Commission in 2001 and subsequently commended to Member States by the United Nations General Assembly, obligates a State from which hazardous activities originate to "take all appropriate measures to prevent significant transboundary harm or at any event to minimize the risk thereof."⁵⁶ The commentary to Article 3 of the Draft Articles asserts that this obligation is "one of due diligence."⁵⁷ Furthermore, the obligation "is not intended to guarantee that significant harm be totally prevented, if it is not possible to do so."⁵⁸ Rather, "the conduct of the State of origin . . . will determine whether the State has complied with its [due diligence] obligation."⁵⁹
- 41. Additionally, the International Court of Justice, in its Judgment in the *Pulp Mills on the River Uruguay* case, held that a State's specific obligation to "act with due diligence" involves "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 operations."⁶⁰
- 42. Furthermore, and with specific reference to the law of the sea, the Seabed Disputes Chamber of the Tribunal, in its advisory opinion in Case No. 17 (*Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area*), determined that States Parties to the Convention that sponsor contractors to explore and exploit the international seabed Area have an "obligation to ensure compliance by sponsored contractors with the terms of the contract [to explore and exploit the Area] and the obligations set out in the Convention and related instruments."⁶¹ To comply with this obligation, the sponsoring State must "make best possible efforts to

⁵⁶ International Law Commission, *Draft articles on prevention of transboundary harm from hazardous activities*, 2 Y.B. Int'l L. Comm'n 146, U.N. Doc. A/CN.4/SER.A/2001/Add. 1 (Part 2).

⁵⁷ Id., at 154.

⁵⁸ Id.

⁵⁹ Id.

⁶⁰ Pulp Mills on the River Uruguay (Arg. v. Uru.), Judgment, 2010 I.C.J. Reports 14 (Apr. 20), at ¶ 197.

⁶¹ Seabed Disputes Chamber, Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area, Advisory Opinion, Case No. 17 (Feb. 1, 2011), at ¶ 242(3).

secure compliance by the sponsored contractors,⁶² including the adoption of "measures within its legal system [that are] 'reasonably appropriate.'⁶³ The Seabed Disputes Chamber clarified that the obligation of due diligence "is an obligation to deploy adequate means, to exercise best possible efforts, to do the utmost, to obtain this result. . . [T]his obligation may be characterized as an obligation 'of conduct' and not 'of result.'⁶⁴ The Seabed Disputes Chamber further noted that the content of due diligence obligations "may 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.'⁶⁵

- 43. It bears mentioning that the Tribunal, sitting as a full Tribunal in Case No. 21, echoed and adopted in its advisory opinion the description of the normative content of due diligence obligations that the Seabed Disputes Chamber of the Tribunal utilized, as discussed above.⁶⁶ It also bears mentioning that the Tribunal applied the notion of due diligence obligations not just to States (e.g., flag States) but also to international organizations independent of the obligations of the States that are members of those international organizations (at least with respect to fisheries, the subject matter of Case No. 21).⁶⁷
- 44. Although what due diligence requires may morph over time and with different situations, including in response to changes in science, technology, knowledge, and information, due diligence by a State under international law requires, at a minimum, that all reasonable, necessary, and appropriate steps are taken by the State, in a vigilant manner, to ensure compliance by that State with all relevant requirements and restrictions under international law. If the State fails to take such steps in the requisite manner, then the State commits an internationally wrongful act (even if by omission) and assumes responsibility under international law for that failure, which entails the State ceasing the wrongful act (or undertaking particular acts rather than reposing in a condition of omission), making full reparation for the harm caused by the wrongful act (or omission), and/or cooperating with other States to end the wrongful act (or omission).⁶⁸
- 45. As discussed above, States Parties to the Convention have a series of substantive obligations with respect to preventing, reducing, and controlling pollution of the marine environment from multiple activities and sources indeed, from "any source"⁶⁹ as well as various procedural obligations in connection with the discharge of such substantive obligations. By virtue of the definition of "pollution of the marine environment" in article 1(1)(4) of the Convention, States Parties to the Convention assume the same set of

⁶² Id.

⁶³ Id.

⁶⁴ Id., at ¶ 110.

⁶⁵ Id., at ¶ 117.

⁶⁶ Case No. 21, *supra* note 3, at ¶¶ 131-132.

⁶⁷ Id., at ¶ 173.

⁶⁸ See International Law Commission, *Draft articles on responsibility of States for internationally wrongful acts*, 2 Y.B. Int'l L. Comm'n 26, U.N. Doc. A/CN.4/SER.A/2001/Add. 1 (Part 2), arts. 30, 31, 40, and 41 [hereinafter State Responsibility Draft Articles]

⁶⁹ See Convention, supra note 4, at art. 194(1).

substantive and procedural obligations with respect to preventing, reducing, and controlling pollution of the marine environment caused by anthropogenic greenhouse gas emissions, particularly climate change and Ocean acidification. As also discussed above, States Parties to the Convention have an obligation of due diligence to ensure that such substantive and procedural obligations are met with respect to preventing, reducing, and controlling pollution of the marine environment caused by such anthropogenic greenhouse gas emissions, particularly climate change and Ocean acidification.

46. In order to discharge this obligation of due diligence, as discussed above, States Parties to the Convention are required to not only implement domestic laws, regulations, and other measures, but also take into account and/or adopt laws, regulations, and other measures that are no less effective than existing internationally agreed rules, standards, and recommended practices and procedures; as well as work through competent international organizations or treaty-making processes (i.e., diplomatic conference) to establish new global and regional rules, standards, and recommended practices and procedures to prevent, reduce, and control pollution of the marine environment. With respect to anthropogenic greenhouse gas emissions, in the absence of language in the Convention explicitly mentioning such emissions, climate change, or Ocean acidification, as well as in the absence of future efforts under the Convention to directly address such emissions, climate change, or Ocean acidification, recourse must be sought to "external" internationally agreed rules, standards, and recommended practices and procedures, whether existing or the subject of possible development through competent international organizations or treaty-making processes, in line with the provisions of the Convention cited above. Recourse to such external sources is required not just by the provisions of the Convention referring to such rules, standards, practices, and procedures, as discussed above; but also with norms of treaty interpretation in international law, particularly as codified in article 31(3)(c) of the Vienna Convention on the Law of the Treaties, which underscores that the interpretation of a treaty shall take into account, among other things, "any relevant rules of international law applicable in the relations between the parties" to the treaty.⁷⁰ Indeed, the Tribunal stands to play a key role in clarifying the links between the Convention, intergovernmental efforts to address anthropogenic greenhouse gas emissions, and other intergovernmental processes and multilateral agreements of relevance to such emissions and their pollutive effects on the marine environment.

Relevant sources of internationally agreed rules, standards and recommended practices and procedures

47. Several intergovernmental processes and multilateral agreements provide relevant sources of internationally agreed rules, standards, and recommended practices and procedures and/or allow for the formulation of such rules, standards, practices, and procedures as pertaining to the prevention, reduction, and control of pollution of the marine environment by anthropogenic greenhouse gas emissions. The United Nations Framework Convention on Climate Change ("UNFCCC"), its Kyoto Protocol, and the Paris Agreement, along with the intergovernmental bodies and related institutions established under and/or serving those instruments, are key fora for the international

⁷⁰ Vienna Convention on the Law of Treaties art. 31(3)(c), May 23, 1969, 1155 U.N.T.S. 331.

community to address anthropogenic greenhouse gas emissions from multiple sources, including industry, agriculture, land-based transportation, and power generation. The International Civil Aviation Organization and the International Maritime Organization, along with their constituent instruments and subsequent regulatory promulgations, address anthropogenic greenhouse gas emissions from aviation and shipping, respectively, which the UNFCCC, its Kyoto Protocol, and the Paris Agreement do not directly address. The Vienna Convention for the Protection of the Ozone Laver and particularly - its Montreal Protocol on Substances that Deplete the Ozone Layer and attendant Kigali Amendment play important roles in regulating so-called short-lived climate pollutants such as hydrochlorofluorocarbons and hydrofluorocarbons that have significant greenhouse effects on the atmosphere of several orders of magnitude greater than carbon dioxide (and whose phase-down/phase-out can lead to the avoidance of up to half a degree Celsius of global warming). The Conference of the Parties to the Convention on Biological Diversity has undertaken important work in connection to anthropogenic greenhouse gas emissions, including in the Kunming-Montreal Global Biodiversity Framework adopted in December 2022, which, inter alia, contains a Target 8 on minimizing the impacts of climate change and Ocean acidification on biological diversity;⁷¹ as well as a Target 11 on restoring, maintaining, and enhancing nature's contributions to people, including ecosystem functions and services, through, inter alia, regulation of climate.⁷² Thus, to the extent that pollution of the marine environment under the Convention encompasses anthropogenic greenhouse gas emissions, the identification of obligations of States Parties to the Convention to prevent, reduce, and control such pollution depends at least in part on the identification of obligations of those same States under the treaties and related intergovernmental processes, organizations, institutions referenced in this paragraph, insofar as those treaties, processes, organizations, and institutions impose obligations pertaining to the prevention, reduction, and control of anthropogenic greenhouse gas emissions.

48. While the Convention does not explicitly reference anthropogenic greenhouse gas emissions, several normative processes under the Convention since the adoption of the Convention allow for the consideration of such matters. The negotiations on legally binding exploitation regulations for the Mining Code of the International Seabed Authority have relevance to anthropogenic greenhouse gas emissions, insofar as activities in the international seabed Area could potentially disturb greenhouse gases – e.g., methane, carbon dioxide – stored in the seabed and subsoil of the Area, leading to possible leakage into the broader marine environment as well as the atmosphere (which, in turn, will impact the marine environment via the processes referenced above). Additionally, the adoption of the international legally binding instrument under the Convention on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction ("BBNJ instrument") could lead to the establishment of area-based management tools in areas beyond national jurisdiction that, *inter alia*, minimize ship vessel transit through certain such areas (which might impact the level of greenhouse gas emissions from such vessels), influence the regulation of activities in the

⁷¹ Kunming-Montreal Global Biodiversity Framework target 8, Decision adopted by the Parties to the Convention on Biological Diversity, CBD/COP/DEC/15/4, Dec. 19, 2022.

⁷² Id., at target 11.

international seabed Area (which might minimize the disruption of stores of greenhouse gases in the Area), protect certain marine creatures from over-exploitation (which might enhance their capacities as carbon storage, such as whales and other cetaceans that store carbon through their lifetimes and sequester them in the deep seabed upon natural death), and safeguard marine areas that are critical to the regulation of the climate system (such as sargassum seagrass acting as carbon sinks); as well as lead to the requirement to conduct environmental impact assessments that address the impacts on areas beyond national jurisdiction by anthropogenic greenhouse gas emissions from planned activities, including planned activities on land (such as power generation) as well as at sea (such as ship vessel transit).

- 49. Following the identification of the relevant internationally agreed rules, standards, and recommended practices and procedures pertaining to the prevention, reduction, and control of anthropogenic greenhouse gas emissions (including the Tribunal's identification of such rules, standards, practices, and procedures in the present Case No.31), it is clear that in order to discharge their obligation of due diligence in this regard, States Parties to the Convention must take all reasonable, necessary, and appropriate steps, in a vigilant manner, to ensure compliance by those States Parties, including private actors within their jurisdiction and control, with all such rules, standards, practices, and procedures, with the ultimate aim of preventing, reducing, and controlling the pollution of the marine environment caused by anthropogenic greenhouse gas emissions.
- 50. While there are multiple multilateral instruments and intergovernmental processes of relevance to this matter, as discussed above, a major feature of such instruments and processes is the aim under the Paris Agreement to hold the increase in the global average temperature to well below 2 degrees Celsius above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5 degrees Celsius above pre-industrial levels,⁷³ with the attendant recognition that achieving the latter will significantly reduce the risks and impacts of climate change (and, indirectly, Ocean acidification) compared to the former. In order to reach these temperature goals, Parties to the Paris Agreement "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 . . . so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of [the 21st] century"⁷⁴ – essentially, achieving what is colloquially called "net zero" emissions of greenhouse gases by around 2050, preceded by the peaking of emissions and rapid reductions as soon as possible after the entry into force of the Paris Agreement. The preamble of the Paris Agreement also recognizes the importance of "ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity ... when taking action to address climate change."⁷⁵ The temperature goals of the Paris Agreement animate much of the discourse under other relevant multilateral agreements and intergovernmental organizations, institutions, and processes referenced above,

⁷³ Paris Agreement art. 2(1), Dec. 12, 2015, 3156 U.N.T.S. 1

⁷⁴ Id., at art. 4(1).

⁷⁵ Id., at preamble.

particularly the aim of limiting temperature increase to 1.5 degrees Celsius above preindustrial levels (a goal particularly championed by small island developing States like the FSM as well as members of COSIS in the negotiations for the Paris Agreement, in recognition of the existential threat to such States posed by temperature increase beyond that limit) as well as the need to peak and rapidly reduce anthropogenic greenhouse gas emissions as soon as possible in advance of achieving net zero emissions by the middle of this century.

- 51. Thus, in order for States Parties to the Convention to fully discharge their obligation to prevent, reduce, and control pollution of the marine environment, they must, among other things, take all reasonable, necessary, and appropriate steps, in a vigilant manner, to ensure compliance by those States Parties with all the rules, standards, practices, and procedures pertaining to limiting global temperature increase to 1.5 degrees Celsius above pre-industrial levels (and the attendant aims of rapid peaking and reduction of anthropogenic greenhouse gas emissions and the eventual attainment of net zero emissions by the middle of the current century), including through the UNFCCC, the Paris Agreement, and other multilateral agreements and intergovernmental institutions, organizations, and processes that address anthropogenic greenhouse gas emissions. The Tribunal plays a central role, particularly through its advisory opinion in the present Case No. 31, in interpreting and applying these rules, standards, practices, and procedures as a coherent whole, with a focus on limiting global temperature increase to 1.5 degrees Celsius above pre-industrial levels (and achieving rapid peaking and reduction of anthropogenic greenhouse gas emissions in the short term, as well as net zero emissions by the middle of the current century) and, consequently, warding off the pollution of the marine environment and the deleterious effects of such pollution identified under the Convention.
- 52. Particular attention must be paid to the specific nature of Ocean acidification, separate from other harmful effects of anthropogenic greenhouse gas emissions. Ocean acidification is not directly regulated by any single multilateral agreement. The UNFCCC and the Paris Agreement have an atmospheric orientation, focusing on the degree to which anthropogenic greenhouse gas emissions result in dangerous interference to the global atmosphere. Temperature goals such as the limit of 1.5 degrees Celsius in the Paris Agreement are not directly relevant to the avoidance of Ocean acidification, although warming and Ocean acidification share the same root cause. The same goes for the various other multilateral agreements and related intergovernmental institutions, organizations, and processes referenced in paragraph 49 above, whose efforts with respect to regulating anthropogenic greenhouse gas emissions focus more on atmospheric harms and the resultant global warming, and not so much on the related but distinct phenomena of Ocean acidification. The Convention provides perhaps the best instrument for addressing Ocean acidification, given that "pollution of the marine environment" includes the anthropogenic introduction of carbon dioxide into the marine environment as a distinct form of pollution (as opposed to anthropogenic introduction of carbon dioxide and other greenhouse gas emissions into the atmosphere, resulting in harmful climate change effects).

Climate change-related sea-level rise and maritime zones

- 53. Particular attention must also be paid to a certain element of sea-level rise with respect to its characterization as a form of pollution of the marine environment under the Convention, insofar as such sea-level rise is the result of anthropogenic greenhouse gas emissions. As discussed above, the definition of "pollution of the marine environment" under the Convention refers to a number of "deleterious effects" that include, inter alia, "hindrance to marine activities, including fishing and other legitimate uses of the sea, ... and reduction of amenities." According to the so-called ambulatory theory of baselines, when a coastal State experiences sea-level rise, one result is the landward shift of the coastal State's maritime zones due to the landward shifting of the low-water line along the State's coastline used to establish the coastal State's maritime baselines (and the attendant maritime zones) under the Convention. As a consequence, under the ambulatory theory of baselines, this could reduce or otherwise impair the rights and entitlements of that coastal State to the uses of its maritime zones and the resources therein, insofar as a landward shift of those maritime zones removes certain maritime areas and the resources therein from the sovereignty, sovereign rights, or jurisdiction of that coastal State. This would essentially constitute a "hindrance to marine activities, including fishing and other legitimate uses of the sea," as well as a "reduction of amenities" deriving from the affected maritime zones and resources therein.
- 54. It is the view of the FSM and much of the rest of the international community, however, that the Convention does not require adherence to an ambulatory theory of baselines. The FSM draws the attention of the Tribunal to the ongoing work of the International Law Commission on the topic of sea-level rise in relation to international law, particularly the International Law Commission's work on the law of the sea aspects of the topic, which, inter alia, has discussed with growing internal consensus the assertion that the Convention does not impose an obligation on coastal States Parties to keep their maritime baselines and outer limits of their maritime zones under review nor to update charts or lists of geographical coordinates of points once deposited with the Secretary-General of the United Nations.⁷⁶ The FSM also draws the attention of the Tribunal to the August 2021 Pacific Islands Forum Leaders' Declaration on Preserving Maritime Zones in the Face of Climate Change-related Sea-Level Rise, which, inter alia, echoes the abovementioned assertion arising out of the work of the International Law Commission and "[p]roclaim[s] that [the] maritime zones [of members of the Pacific Islands Forum], as established and notified to the Secretary-General of the United Nations in accordance with the Convention, and the rights and entitlements that flow from them, shall continue to apply, without reduction, notwithstanding any physical changes connected to climate change-related sea-level rise;⁷⁷ as well as the September 2021 Declaration of the

⁷⁶ For the latest encapsulation of the discussions in the International Law Commission as well as feedback from the Members of the United Nations General Assembly and the international community overall, see Sea-level rise in relation to international law, Additional paper to the first issues paper (2020), by Bogdan Aurescu and Nilufer Oral, Co-Chairs of the Study Group on sea-level rise in relation to international law ¶¶ 83-98, Feb. 13, 2023, International Law Commission, A/CN.4/761.

⁷⁷ Declaration on Preserving Maritime Zones in the Face of Climate Change-related Sea-Level Rise, accessible at <u>https://www.forumsec.org/2021/08/11/declaration-on-preserving-maritime-zones-in-the-face-of-climate-change-related-sea-level-rise/</u>.

Leaders of the Alliance of Small Island States, whose paragraph 41 "[a]ffirms that there is no obligation under the United Nations Convention on the Law of the Sea to keep baselines and outer limits of maritime zones under review nor to update charts or lists of geographical coordinates once deposited with the Secretary-General of the United Nations, and that such maritime zones and the rights and entitlements that flow from them shall continue to apply without reduction, notwithstanding any physical changes connected to climate change-related sea-level rise."⁷⁸ As a member of the Pacific Islands Forum and the Alliance of Small Island States, the FSM fully subscribes to the above-cited provisions from their respective Declarations, as well as to the consensus emerging in the International Law Commission on the matter.

55. In that respect, the FSM urges the Tribunal to refrain from concluding in its advisory opinion in the present Case No. 31 that one of the "deleterious effects" caused by sealevel rise as a result of anthropogenic greenhouse gas emissions is the landward shifting of maritime zones and the concomitant undermining of rights and entitlements to marine activities and other lawful uses of the sea in the maritime areas, as well as enjoyment of amenities, that are supposedly "lost" for coastal States as a result of that landward shifting. That is, while the physical phenomenon of climate change-related sea-level rise will likely cause significant harmful consequences for coastal communities of a coastal State due to inundation and other physical impacts on coastal areas, it does not also necessarily follow under the Convention that climate change-related sea-level rise has the legal effect of shifting maritime baselines and the outer limits of maritime zones of a coastal State landward and/or diminishing or otherwise undermining the rights and entitlements of the coastal State to those maritime zones and the resources therein. On the contrary, if the Tribunal is to opine on this particular issue, then the Tribunal should find that the international community as a whole – and particularly States that are major emitters of anthropogenic greenhouse gas emissions – has an obligation to support the above-mentioned Declarations by the Pacific Islands Forum and Alliance of Small Island States as accurate reflections of the Convention. The preservation of maritime baselines, the outer limits of maritime zones, and the rights and entitlements thereunder will, among other things, ward off the sort of "deleterious effects" that an ambulatory theory of maritime baselines poses in the context of anthropogenic greenhouse gas emissions.

State responsibility for internationally wrongful acts

56. While Question 1 primarily addresses primary rules of State responsibility – i.e., the obligations of States to act (or not omit to act) in a lawful manner to achieve certain aims – it bears mentioning that when a State breaches such obligations, that triggers secondary rules of State responsibility for that State. Building on the point raised in paragraph 44 above, attention may be paid to the Draft Articles on Responsibility of States for Internationally Wrongful Acts,⁷⁹ which were adopted by the International Law Commission in 2001, and which have been widely used in international legal disputes despite not being (as of yet) a binding instrument. The Draft Articles codify rules of customary international law regarding how States become liable for internationally

⁷⁸ See https://www.aosis.org/launch-of-the-alliance-of-small-island-states-leaders-declaration/.

⁷⁹ State Responsibility Draft Articles, *supra* note 68.

wrongful acts, as well as how States may discharge that liability. The Tribunal has recognized the Draft Articles as the relevant rules of general international law in examining the responsibility of States for internationally wrongful acts, pursuant to article 293 of the Convention.⁸⁰ According to the Draft Articles, the State is obligated to provide full reparation for the harm caused by its internationally wrongful act.⁸¹ Per the Draft Articles, generally accepted forms of reparation for internationally wrongful acts include restitution,⁸² compensation,⁸³ and satisfaction.⁸⁴ According to the Draft Articles, restitution—i.e., "re-establish[ing] the situation which existed before the wrongful act was committed".⁸⁵—is the preferred form of reparation under customary international law and should be obtained unless it is "not materially impossible" or it involves "a burden out of all proportion to the benefit deriving from restitution instead of compensation."⁸⁶

57. Consequently, if a State Party to the Convention is deemed to be responsible for the emission of greenhouse gases to the extent that such emissions result in the pollution of the marine environment (presumably because the State Party did not discharge its obligation of due diligence to ensure the prevention, reduction, or control of such pollution), then the State commits an internationally wrongful act for which it must provide full reparation. Full reparation could include restoring the marine environment to its pre-pollution condition, or (if that is deemed materially impossible) compensating those harmed by that pollution of the marine environment and/or providing satisfaction in the form of carrying out the actions that the State should have carried out in the first place to avoid becoming responsible for an internationally wrongful act. Compensation could come in the form of contributions to the newly established fund to address loss and damage under the UNFCCC and the Paris Agreement, and/or contributions to liability funds under the International Maritime Organization, the International Seabed Authority, and other relevant intergovernmental organizations and processes. Satisfaction could come in the form of revising nationally determined contributions under the Paris Agreement to be more ambitious, or taking on higher emission reduction targets for shipping vessels under the International Maritime Authority or airplanes under the International Civil Aviation Organization, particularly with respect to peaking and rapid reductions of greenhouse gas emissions by the responsible State as soon as possible. Providing such full reparation is part of the corpus of obligations that States Parties to the Convention have with respect to the prevention, reduction, and control of pollution of the marine environment, arising as a secondary rule of State responsibility.

⁸⁰ Case No. 21, *supra* note 3, at ¶ 143-144.

⁸¹ State Responsibility Draft Articles, *supra* note 68, at art. 31(1).

⁸² Id., at art. 35.

⁸³ Id., at art. 36.

⁸⁴ Id., at art. 37.

⁸⁵ Id., at art. 35.

⁸⁶ Id.

Question 2

"What are the specific obligations of State[s] Parties to the United Nations Convention on the Law of the Sea (the 'UNCLOS'), including under Part XII, to protect and preserve the marine environment in relation to climate change impacts, including ocean warming and sea level rise, and ocean acidification?"

Protection and preservation of the marine environment

- 58. While the obligation of States Parties to the Convention to prevent, reduce, and control the pollution of the marine environment is a major component of the obligation of the same States Parties under Part XII of the Convention to protect and preserve the marine environment, it is not the totality of the latter obligation. Article 192 encompasses, in clear, concise, and direct language, the obligation on States to protect and preserve the marine environment. The rest of the articles in Part XII flesh out this obligation, and so do various other articles in the Convention outside of Part XII that cross-reference Part XII (e.g., article 142) as well as reference the "protection of the marine environment" without explicitly mentioning Part XII (e.g., article 60 on the construction of artificial islands, installations, and structures in exclusive economic zones; article 145 with respect to activities in the international seabed Area, as well as the overall development of rules, regulations, and procedures of the International Seabed Authority). While many of those articles in and outside of Part XII explicitly reference the prevention, reduction, and control of pollution of the marine environment, not all of them do, and rightly so. Indeed, as recognized by the arbitral tribunal in the Chagos Marine Protected Area Arbitration, "While the control of pollution is certainly an important aspect of environmental protection, it is by no means the only one."⁸⁷ The same tribunal stressed that the duty to protect the marine environment "extends to measures focused primarily on conservation and the preservation of ecosystems."⁸⁸ Additionally, this Tribunal has identified "the conservation of the living resources of the sea" as part of the duty to protect the marine environment.⁸⁹ Furthermore, the duty to protect the marine environment is not limited to protecting the marine environment from any particular source or type of harm (e.g., pollution of the marine environment).
- 59. The obligation to protect and preserve the marine environment has two key components: protection and preservation. The arbitral tribunal in the *South China Sea Arbitration* characterized the "general obligation" to protect and preserve the marine environment as having a positive element and a negative element. Namely:

This "general obligation" extends both to "protection" of the marine environment from future damage and "preservation" in the sense of maintaining or improving

⁸⁷ Chagos Marine Protected Area Arbitration (Mauritius v. United Kingdom), Award (PCA 2015), 18 March 2015, at ¶ 320.

⁸⁸ Id.

⁸⁹ Southern Bluefin Tuna (New Zealand v. Japan; Australia v. Japan), Provisional Measures, Order of 27 August 1999, ITLOS Reports 1999, p. 280, at p. 295, ¶ 70, cited in Case No. 21, supra note 3, at ¶ 120.

its present condition. Article 192 [of the Convention] thus entails the positive obligation to take active measures to protect and preserve the marine environment, and by logical implication, entails the negative obligation not to degrade the marine environment.⁹⁰

- 60. It is the FSM's view that the obligation to protect and preserve the marine environment reflects customary international law, and that many of the provisions in Part XII of the Convention that discharge this obligation also reflect customary international law, including provisions (such as article 197) obligating States to cooperate globally and/or regionally, directly or through competent international organizations, to develop and implement international rules, standards, and recommended practices and procedures for the protection and preservation of the marine environment. Indeed, it bears mentioning that Part XII refers to "States" rather than "States Parties" to the Convention, strongly implying that the obligations contained in Part XII are customary in nature and bind States that are not States Parties to the Convention.
- 61. In light of the foregoing, States Parties to the Convention are obligated under the Convention to protect and preserve the marine environment with respect to anthropogenic greenhouse gas emissions and their effects even if such emissions or effects do not qualify as "pollution of the marine environment" under the Convention. As demonstrated above, anthropogenic greenhouse gas emissions harm the marine environment, both directly (through the insertion of carbon dioxide into the marine environment, producing Ocean acidification) and indirectly (through thermal transfer into the Ocean of heat trapped in the Earth's atmosphere by excessive anthropogenic greenhouse emissions, leading to Ocean warming, Ocean deoxygenation, and other harmful examples of climate change; as well as through the devastation wrought on the marine environment by severe tropical cyclones / typhoons supercharged by a warming Ocean and high moisture retention in the atmosphere). These harms exist whether or not they are characterized as "pollution of the marine environment" under the Convention.

Obligation of due diligence

62. In light of the obligation in article 197 of the Convention for States to cooperate globally and/or regionally, directly or through competent international organizations, to develop and implement international rules, standards, and recommended practices and procedures for the protection and preservation of the marine environment, the obligation of due diligence pertaining to States Parties to the Convention identified in response to Question 1 with respect to the prevention, reduction, and control of pollution of the marine environment applies as well to the obligation to protect and preserve the marine environment. To this end, States Parties to the Convention must take all reasonable, necessary, and appropriate steps, in a vigilant manner, to ensure compliance by those States Parties with all such international rules, standards, and recommended practices and procedures, with a view to protecting and preserving the marine environment. Prominent among such rules, standards, practices, and procedures are those aiming to limit global

⁹⁰ The South China Sea Arbitration, Award of 12 July 2016, P.C.A. Case No. 2013-19, at ¶ 941.

average temperature rise to 1.5 degrees Celsius above pre-industrial averages, along with the attendant aims of peaking and rapidly reducing anthropogenic greenhouse gas emissions as soon as possible and achieving net zero emissions globally by the middle of the 21st century, as outlined in the Paris Agreement. As noted in paragraph 51 of the present written statement, the Tribunal plays a central role, particularly through its advisory opinion in the present Case No. 31, in interpreting and applying these rules, standards, practices, and procedures as a coherent whole, with a focus on limiting global temperature increase to 1.5 degrees Celsius above pre-industrial levels (and achieving rapid peaking and reduction of anthropogenic greenhouse gas emissions in the short term, as well as net zero emissions by the middle of the current century) and, consequently, protecting and preserving the marine environment. Additionally, States Parties to the Convention must adopt and implement measures that directly protect and preserve the marine environment, inclusive of the biological diversity therein, in response to the harmful effects of anthropogenic greenhouse gas emissions. The establishment of marine protected areas and other area-based management tools under the BBNJ instrument and/or by various sectoral and regional instruments, frameworks, and bodies (such as the International Maritime Organization, the International Seabed Authority, and various regional and subregional fisheries management organizations) are examples of such measures, especially if they manage marine areas that are threatened by climate change and/or Ocean acidification and/or are essential to the sequestration of carbon dioxide (and thus in the long run contribute to the protection and preservation of the marine environment through the lowering of anthropogenic greenhouse gas emissions in the atmosphere).

Human rights relating to the protection and preservation of the marine environment

63. The obligation to protect and preserve the marine environment must also be examined in light of the adoption of the United Nations General Assembly in July 2022 of resolution 76/300, which recognizes the right to a clean, healthy, and sustainable environment as a human right.⁹¹ The resolution notes that "the right to a clean, healthy and sustainable environment is related to other rights and existing international law,"⁹² affirms "that the promotion of the human right to a clean, healthy and sustainable environment requires the full implementation of the multilateral environmental agreements under the principles of international environmental law,"⁹³ and calls on States and international organizations (among others) to "adopt policies, to enhance international cooperation . . . and continue to share good practices in order to scale up efforts to ensure a clean, healthy and sustainable environment for all."⁹⁴ The failure to protect and preserve the marine environment, including by failing to regulate anthropogenic greenhouse gas emissions to avoid harmful effects on the marine environment beyond limits accepted by the international community in the UNFCCC, the Paris Agreement, and other relevant multilateral instruments and intergovernmental organizations, institutions, and processes, is a violation of the right to a clean, healthy, and sustainable environment that all

⁹¹ G.A. Res. 76/300, ¶ 1, U.N. Doc. A/RES/76/300 (July 28, 2022).

⁹² Id., at ¶ 2.

⁹³ Id., at ¶ 3.

⁹⁴ Id., at ¶ 4.

members of the international community – including States that are not States Parties to the Convention – are obligated to uphold.

64. Even if, assuming *arguendo*, there is some lingering doubt as to whether there actually exists a human right to a clean, healthy, and sustainable environment under international law, despite the adoption of United Nations General Assembly resolution 76/300, there are multiple other human rights under international law that are long-recognized and well-established, and that are violated by a failure to protect and preserve the marine environment, including the failure to regulate anthropogenic greenhouse gas emissions avoid harmful effects on the marine environment beyond limits accepted by the international community in the UNFCCC, the Paris Agreement, and other relevant multilateral instruments and intergovernmental organizations, institutions, and processes. Specifically, a person who is unable to enjoy a healthy marine environment will face significant (and legally unacceptable) challenges to their ability to enjoy a range of core human rights contained in a large number of international and regional human rights instruments, including: the rights to life,⁹⁵ adequate food,⁹⁶ water,⁹⁷ health,⁹⁸ an adequate standard of living (including adequate housing),⁹⁹ the productive use and enjoyment of property,¹⁰⁰ cultural practices and traditions,¹⁰¹ and self-determination.¹⁰² International

⁹⁵ See, e.g., Universal Declaration of Human Rights art. 3, G.A. Res. 217A, UN GAOR, 3d Sess., 1st plen. mtg., UN Doc. A/810 at 71 (Dec. 12, 1948); International Covenant on Civil and Political Rights art. 6, Dec. 16, 1966, 999 U.N.T.S. 171 [hereinafter ICCPR]; Convention on the Rights of the Child art. 6, Nov. 20, 1989, 1577 U.N.T.S. 3 [hereinafter CRC]; American Convention on Human Rights art. 4, Nov. 21 1969, 1144 U.N.T.S. 143 [hereinafter ACHR]; European Convention for the Protection of Human Rights and Fundamental Freedoms art. 3, Nov. 4 1950, 213 U.N.T.S. 221; African Charter on Human and Peoples' Rights art. 4, June 27 1981, 1520 U.N.T.S. 217. A marine environment prone to more severe storms/cyclones or frequent algal blooms, for example, poses mortal dangers to human populations, thus threatening their right to life.
⁹⁶ See, e.g., International Covenant on Economic, Social and Cultural Rights art. 11, Dec. 11 1966, 993 U.N.T.S. 3

³⁰ See, e.g., International Covenant on Economic, Social and Cultural Rights art. 11, Dec. 11 1966, 993 U.N.T.S. 3 [hereinafter ICESCR]; CRC, *supra* note 95, at art. 24(c); International Convention on the Protection and Promotion of the Rights and Dignity of Persons with Disabilities art. 25(f) and art. 28(1), G.A. Res. 61/106, Annex I, UN GAOR, 61st Sess., Supp. No. 49, at 65, UN Doc. A/61/49 (Dec. 13 2006) [hereinafter CRPD]; Convention on the Elimination of All Forms of Discrimination against Women art. 14(2)(h), Dec. 18 1979, 1249 U.N.T.S. 13 [hereinafter CEDAW]; International Convention on the Elimination of All Forms of Racial Discrimination art. 5(e), Mar. 7, 1966, 660 U.N.T.S. 195 [hereinafter ICERD]. Climate change and Ocean acidification undermine subsistence fisheries, among other marine activities, and raise the potential for widespread food shortages, especially for people from regions whose fish intake are major components of their diet.

⁹⁷ See, e.g., CEDAW, *supra* note 96; CRPD, *supra* note 96, at art. 2(2)(a); CRC, *supra* note 95, at art. 24(2)(c).
Ocean acidification weakens coral reef systems, a key element of coastal protection, which in turn increases the likelihood of leaking of saltwater into coastal water wells in low-lying islands and atolls, thereby undermining the right to water.
⁹⁸ See, e.g., ICESCR, *supra* note 96, at art. 12; CEDAW, *supra* note 96, at art. 12; ICERD, *supra* note 96, at art.

⁹⁸ See, e.g., ICESCR, *supra* note 96, at art. 12; CEDAW, *supra* note 96, at art. 12; ICERD, *supra* note 96, at art. 5(e)(iv); CRC, *supra* note 95, at art. 24; CRPD, *supra* note 96, at art. 16(4); European Social Charter art. 11, Oct. 18, 1961, 529 U.N.T.S. 89. Climate change and Ocean acidification, by weakening coastal protections such as coral reef systems and mangrove forests, imperil water security in freshwater wells as well as food plantations (such as taro) located near-shore, thereby diminishing health standards for those affected.

⁹⁹ See, e.g., ICESCR, *supra* note 96, at art. 11; ICERD, *supra* note 96, at art. 5(e)(iii); CEDAW, *supra* note 96, at art. 14(2); CRC, *supra* note 95, at art. 27(3). Climate change Ocean acidification, by weakening coastal protections such as coral reef systems and mangrove forests, threaten coastal settlements, particularly in low-lying islands and atolls where populations have little choice but to establish settlements on or near the coasts.

¹⁰⁰ See, e.g., Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms art. 1, Mar. 20, 1952, E.T.S. 9; ACHR, *supra* note 95, at art. 21. In a typical Pacific Island population such as those in the FSM, marine environments are the source of property holdings as well as resources for fashioning new properties (e.g.,

and human rights courts have also identified the right to a healthy environment, or at least to the resources therein, pursuant to sustainable development as well as with respect to the rights of Indigenous Peoples.¹⁰³

65. In the context of the present Case No. 31, States Parties to the Convention are obligated to take all reasonable, necessary, and appropriate steps, in a vigilant manner, to ensure compliance by those States Parties with all of the human rights obligations enumerated above, including by adopting and implementing measures at the global/international, regional, subregional, and domestic levels that regulate anthropogenic greenhouse gas emissions to avoid harmful effects on the marine environment beyond limits accepted by the international community in the UNFCCC, the Paris Agreement, and other relevant multilateral instruments and intergovernmental organizations, institutions, and processes, with a view to protecting and preserving the marine environment and thus enabling the enjoyment of various core human rights that are dependent at least in part on a clean, healthy, and sustainable marine environment.

coral reefs for foundations, seabed sand for construction), so the destruction of those marine environments including from climate change and Ocean acidification—will hinder the enjoyment of those properties. ¹⁰¹ See, e.g., ICCPR, *supra* note 95, at art. 27. Cultural and traditional practices that are connected to the Ocean are undermined by climate change and Ocean acidification, which threaten totemic and clan-centric marine life (e.g., sharks, whales, certain reef fish) and key elements of cultural/traditional activities (e.g., reef fisheries, which are often communal activities done to perpetuate cultural norms and maintain traditional power alliances). ¹⁰² See, e.g., U.N. Charter art. 1(2); ICESCR, *supra* note 96, at art. 1; ICCPR, *supra* note 95, at art. 1. The right to self-determination is undermined if climate chance and Ocean acidification threaten a population's permanent sovereignty over natural resources, i.e., the right "for their own ends, [to] freely dispose of the [] natural wealth and resources" within their respective territories, which is a core element of the right of peoples to self-determination. See also G.A. Res. 1803 (XVII), Permanent Sovereignty over Natural Resources (Dec. 14, 1962) (establishing rights

and restrictions for national sovereignty over natural resources). However, see paras 53 and 54 of the present written statement for views of the FSM and much of the rest of the international community on how the Convention does not require adherence to an ambulatory theory of maritime baselines as a result of climate change-related sea-level rise. In the absence of ambulatory baselines, permanent sovereignty over natural resources in the marine environment, particularly in territorial waters of a coastal State, is not threatened by climate change-related sea-level rise. Nevertheless, even if the theory of ambulatory baselines is not accepted and the threat of climate change-related sea-level rise is removed from consideration, there remain other threats to the right of peoples to self-determination, including widespread diminishment or loss of marine life (and/or the enabling environmental conditions for that marine life) in the maritime zones of a coastal State due to Ocean acidification and certain climate change effects (e.g., Ocean deoxygenation, Ocean warming, severe cyclone / typhoon activity) that, in turn, undermines the permanent sovereignty over the natural resources in those maritime zones exercised by the peoples of that coastal State. Put another way, a people cannot exercise permanent sovereignty over the natural resources in the marine environment when that same marine environment is not capable of producing and/or harboring those resources.

¹⁰³ See, e.g., Gabcikovo-Nagymaros Project (Hun. v. Slovak.), 1997 I.C.J. 7, 53 (Sep. 25) (separate opinion of Judge Weeramantry) ("The protection of the environment is . . . a vital part of contemporary human rights doctrine, for it is a sine qua non for numerous human rights such as the right to health and the right to life itself"); The Mayagna (Sumo) Indigenous Community of Awas Tingni v Nicaragua, 2001 Inter-Am. Ct. H.R. (Ser. C) No. 68, at 149 (Aug. 16, 2000) (affirming the collective rights of the Awas Tingni indigenous peoples to enjoy and utilize their environment and its resources); Port Hope Environmental Group v. Canada, Decision of the Human Rights Committee under the Optional Protocol to the International Covenant on Civil and Political Rights, UN Communication CCPR/C/17/D/67/1980 (recognizing environmental harms as potentially violating the right to life, as established in the ICCPR).

- 66. Similar to the points raised in paragraphs 56 and 57 above, when a State Party to the Convention engages in an act (or omits to act in a certain manner) that results in excessive anthropogenic greenhouse gas emissions that in turn harm the marine environment (presumably because the State Party failed to discharge its due diligence obligation to regulate such emissions in order to ensure the protection and preservation of the marine environment), then that State Party assumes responsibility under international law for an internationally wrongful act, for which the State Party must provide full reparation.
- 67. Full reparation could include restoring the marine environment to its conditions before being harmed by such emissions (and indeed, the notion of the "preservation" of the marine environment has traditionally been viewed as including restoration of the impacted marine environment to its pre-harm state); or (if that is deemed materially impossible) compensating those harmed by the harms to the marine environment and/or providing satisfaction in the form of carrying out the actions that the State should have carried out in the first place to avoid becoming responsible for an internationally wrongful act. Types of possible compensation and satisfaction include those identified in paragraph 57 above; as well as, for example, pursuing stringent conservation measures for the marine environment in various related intergovernmental fora, with a view to directly protecting and preserving the marine environment from the harmful effects of climate change and Ocean acidification. As noted in paragraph 57 above, providing such full reparation is part of the corpus of obligations that States Parties to the Convention have with respect to the protection and preservation of the marine environment, even if such full reparation arises as a secondary rather than primary rule of State responsibility.

CHAPTER 5

CONCLUDING REMARKS

- 68. The FSM acknowledges the recent adoption by the United Nations General Assembly of resolution 77/276 requesting the International Court of Justice to issue an advisory opinion on the obligations of States in respect of climate change. The FSM notes that the resolution, *inter alia*, cites the Convention as an instrument to which the International Court of Justice must have "particular regard" when answering the question requested of it.¹⁰⁴ The FSM welcomes this effort at canvassing all relevant sources of international law, with a view to breaking down persistent silos and minimizing the fragmentation that has long plagued international law. This is a worthy effort in and of itself, as well as in light of the fact that climate change is a global phenomenon a planetary crisis that affects all aspects of human existence and all components of the natural environment, so it makes clear sense for the International Court of Justice to take such an expansive view of the relevant international law as it produces its advisory opinion.
- 69. For similar reasons, the FSM strongly encourages the Tribunal to do the same, bearing in mind that the Convention countenances the application of other relevant law as long as they are not incompatible with the Convention. A robust, expansive, inclusive advisory opinion from the Tribunal in the present Case No. 31 will represent a landmark contribution by the Tribunal to international law, potentially influencing the work of the International Court of Justice; as well as a vital tool in support of efforts by COSIS and other members of the international community to protect present and future generations and the natural environments bequeathed to us by our ancestors from the scourge of anthropogenic greenhouse gas emissions, particularly on the marine environment.

¹⁰⁴ G.A. Res. 77/276, U.N. Doc. A/RES/77/276 (March 29, 2023).