

Chapter IX

Sea-level rise in relation to international law

A. Introduction

240. At its seventieth session (2018), the Commission decided to include the topic “Sea-level rise in relation to international law” in its long-term programme of work.⁴³¹

241. In its resolution 73/265 of 22 December 2018, the General Assembly subsequently noted the inclusion of the topic in the long-term programme of work of the Commission, and in that regard called upon the Commission to take into consideration the comments, concerns and observations expressed by Governments during the debate in the Sixth Committee.

242. At its seventy-first session (2019), the Commission decided to include the topic in its programme of work. The Commission also decided to establish an open-ended Study Group on the topic, to be co-chaired, on a rotating basis, by Mr. Bogdan Aurescu, Mr. Yacouba Cissé, Ms. Patrícia Galvão Teles, Ms. Nilüfer Oral and Mr. Juan José Ruda Santolaria. The Commission further took note of the joint oral report of the Co-Chairs of the Study Group.⁴³²

243. Also during that session, the Study Group, co-chaired by Ms. Patrícia Galvão Teles and Ms. Nilüfer Oral, held a meeting on 6 June 2019. The Study Group considered an informal paper on the organization of its work containing a road map for 2019 to 2021. The discussion of the Study Group focused on its composition, its proposed calendar and programme of work, and its methods of work.⁴³³

244. With regard to the programme of work, and subject to adjustment in the light of the complexity of the issues to be considered, the Study Group was expected to work on the three subtopics identified in the syllabus prepared in 2018,⁴³⁴ namely: issues related to the law of the sea, under the co-chairpersonship of Mr. Bogdan Aurescu and Ms. Nilüfer Oral; and issues related to statehood, as well as issues related to the protection of persons affected by sea-level rise, under the co-chairpersonship of Ms. Patrícia Galvão Teles and Mr. Juan José Ruda Santolaria.

245. As to the methods of work, it was anticipated that approximately five meetings of the Study Group would take place at each session. It was agreed that, prior to each session, the Co-Chairs would prepare an issues paper. The issues papers would be edited, translated and circulated as official documents to serve as the basis for the discussion and for the annual contribution of the members of the Study Group. They would also serve as the basis for subsequent reports of the Study Group on each subtopic. Members of the Study Group would then be invited to put forward contribution papers that could comment upon, or complement, the issues paper prepared by the Co-Chairs (by addressing, for example, regional practice, case law or any other aspects of the subtopic). Recommendations would be made at a later stage regarding the format of the outcome of the work of the Study Group.

246. It was also agreed that, at the end of each session of the Commission, the work of the Study Group would be reflected in a report, taking due account of the issues paper prepared by the Co-Chairs and the related contribution papers by members, while summarizing the discussion of the Study Group. That report would be agreed upon in the Study Group and subsequently presented by the Co-Chairs to the Commission, so that a summary could be included in the annual report of the Commission.

⁴³¹ *Official Records of the General Assembly, Seventy-third Session, Supplement No. 10 (A/73/10)*, para. 369.

⁴³² *Official Records of the General Assembly, Seventy-fourth Session, Supplement No. 10 (A/74/10)*, paras. 265–273.

⁴³³ *Ibid.*, para. 269.

⁴³⁴ *Official Records of the General Assembly, Seventy-third Session, Supplement No. 10 (A/73/10)*, Annex B.

B. Consideration of the topic at the present session

247. At the present session, the Commission reconstituted the Study Group on sea-level rise in relation to international law, chaired by the two Co-Chairs on issues related to the law of the sea, namely Mr. Bogdan Aurescu and Ms. Nilüfer Oral.

248. In accordance with the agreed programme of work and methods of work, the Study Group had before it the first issues paper on the topic ([A/CN.4/740](#) and [Corr.1](#)), which was issued together with a preliminary bibliography ([A/CN.4/740/Add.1](#)), prepared by Mr. Aurescu and Ms. Oral.

249. Owing to the outbreak of the COVID-19 pandemic, and the ensuing postponement of the seventy-second session of the Commission, the Co-Chairs invited the Commission's members to transmit written comments on the first issues paper directly to them. After the completion of the first issues paper, Antigua and Barbuda and the Russian Federation submitted information, which was posted on the Commission's website together with the information previously received from Governments⁴³⁵ in response to the request by the Commission in chapter III of its 2019 annual report.⁴³⁶ Comments from the Pacific Islands Forum relating to the first issues paper were circulated to all members of the Study Group on 31 May 2021.

250. The Study Group held eight meetings, from 1 to 4 June and on 6, 7, 8 and 19 July 2021.⁴³⁷

251. At its 3550th meeting, on 27 July 2021, the Commission took note of the joint oral report of the Co-Chairs of the Study Group.⁴³⁸

Discussions held in the Study Group

252. At the first meeting of the Study Group, held on 1 June 2021, the Co-Chair (Ms. Oral) indicated that the purpose of the initial four meetings to be held during the first part of the session was to allow for a substantive exchange, in the manner of a plenary, on the first issues paper and on any relevant matters that members might wish to address. A summary of that exchange, in the form of an interim report, would then serve as a basis for discussion at the meetings of the Study Group scheduled for the second part of the session. Following those discussions during the second part of the session, that report would be consolidated, agreed upon in the Study Group, and subsequently presented by the Co-Chairs to the Commission, with a view to being included in the annual report of the Commission. That procedure, agreed upon by the Study Group, was based on the 2019 report of the Commission.

253. With regard to the substance of the topic, as also indicated in the syllabus prepared in 2018, it was recalled that the factual consequences of sea-level rise prompt a number of important questions relevant to international law. To the extent that they concern issues related to the law of the sea, these questions include that of the legal implications of the inundation of low-lying coastal areas and of islands upon their baselines, upon maritime zones extending from those baselines and upon delimitation of maritime zones, whether by agreement or adjudication. The 2018 syllabus also provided that these questions are to be examined through an in-depth analysis of existing international law, including treaty and customary international law, in accordance with the mandate of the Commission, which is the progressive development of international law and its codification.⁴³⁹ This effort could

⁴³⁵ Croatia, Maldives, the Federated States of Micronesia, the Netherlands, Romania, Singapore, the United Kingdom of Great Britain and Northern Ireland, and the United States of America. Information was also received from the Pacific Islands Forum. The information submitted is available from: https://legal.un.org/ilc/guide/8_9.shtml.

⁴³⁶ *Official Records of the General Assembly, Seventy-fourth Session, Supplement No. 10 (A/74/10)*, paras. 31–33.

⁴³⁷ See chapter I, above, for the membership of the Study Group.

⁴³⁸ See [A/CN.4/SR.3550](#).

⁴³⁹ *Official Records of the General Assembly, Seventy-third Session, Supplement No. 10 (A/73/10)*, Annex B, para. 5. Paragraph 14 of the 2018 syllabus provides, in part: "This topic deals only with the legal implications of sea-level rise. It does not deal with protection of environment, climate change

contribute to the endeavours of the international community to ascertain the degree to which current international law is able to respond to these issues and where there is a need for States to develop practicable solutions in order to respond effectively to the issues prompted by sea-level rise.

(a) **First issues paper**

254. The first issues paper was introduced by the Co-Chairs of the Study Group (Mr. Aureescu and Ms. Oral) at the first meeting of the Study Group with a summary of key points and preliminary observations.

255. The Co-Chair (Mr. Aureescu) presented the introduction, Part One and Part Two of the first issues paper. He recalled, *inter alia*, that the introduction to the first issues paper contained a summary of the views expressed by Member States in the Sixth Committee, and also drew the attention of the Study Group to the comments made by delegations in the Sixth Committee, during the seventy-fifth session of the General Assembly (2020), after the issuance of the first issues paper. A number of delegations had expressed appreciation for the first issues paper,⁴⁴⁰ while a few others had simply referred to it.⁴⁴¹ The scope and suggested final outcome of the topic, the limitations on the scope of the work of the Study Group, as agreed by the Commission, the focus on the practice of States and of regional and international organizations were recalled.

256. The Co-Chair (Mr. Aureescu) presented the analysis of the first issues paper on the possible legal effects of sea-level rise on the baselines and outer limits of the maritime spaces that are measured from the baselines, including an analysis of the effects of the abutment of the baselines as a result of sea-level rise. He then introduced the analysis of the first issues paper on the possible legal effects of sea-level rise on maritime delimitations, as well as on the issue of whether sea-level rise constituted a fundamental change of circumstances, in accordance with article 62, paragraph 2, of the 1969 Vienna Convention on the Law of Treaties.⁴⁴² The Co-Chair (Mr. Aureescu) also presented the main preliminary observations of the Co-Chairs' analysis on the possible legal effects of sea-level rise on the baselines and outer limits of the maritime spaces measured from the baselines, as well as on maritime delimitations, effected either by agreement or by adjudication, as presented in paragraphs 104 and 141 of the first issues paper.

257. The Co-Chair (Ms. Oral) then presented the structure and content of Parts Three and Four of the first issues paper and pointed, *inter alia*, to the two central issues addressed therein: the potential legal consequences of the landward shift of a newly drawn baseline due to sea-level rise, and the impact of sea-level rise on the legal status of islands, rocks and low-tide elevations. This was followed by an overview of the possible consequences on the rights and jurisdiction of the coastal State, as well as third party States, in established maritime zones where maritime zones shift because part of the internal waters become territorial sea, part of the territorial sea becomes contiguous zone and/or exclusive economic zone, and part of the exclusive economic zone becomes high seas. The Co-Chair (Ms. Oral) also highlighted

per se, causation, responsibility and liability. It does not intend to provide a comprehensive and exhaustive scoping of the application of international law to the questions raised by sea-level rise, but to outline some key issues. The three areas to be examined should be analysed only within the context of sea-level rise notwithstanding other causal factors that may lead to similar consequences. Due attention should be paid, where possible, to distinguish between consequences related to sea-level rise and those from other factors. This topic will not propose modifications to existing international law, such as the 1982 United Nations Convention on the Law of the Sea. Other questions may arise in the future requiring analysis.”

⁴⁴⁰ Eleven delegations, out of the 25 that made statements on the Commission's work, expressed appreciation for the first issues paper: Belize, on behalf of the Alliance of Small Island States; Fiji, on behalf of the Pacific small island developing States; Maldives; the Federated States of Micronesia; New Zealand; Papua New Guinea; Portugal; Solomon Islands; Tonga; Turkey; and Tuvalu, on behalf of the Pacific Islands Forum States.

⁴⁴¹ Three delegations made reference to the first issues paper: the Republic of Korea, Sierra Leone and the United States of America.

⁴⁴² Vienna Convention on the Law of Treaties (Vienna, 23 May 1969), United Nations, *Treaty Series*, vol. 1155, No. 18232, p. 331.

the case of an archipelagic State where, due to the inundation of small islands or drying reefs, the existing archipelagic baselines could be impacted, potentially resulting in the loss of archipelagic baseline status.

258. The Co-Chair (Ms. Oral) further discussed the status of islands and rocks under article 121 of the United Nations Convention on the Law of the Sea⁴⁴³ and the potential significant consequences of being reclassified as a rock due to sea-level rise, possibly becoming a rock that “cannot sustain human habitation or economic life of their own” under article 121, paragraph 3, of the Convention. The Co-Chair (Ms. Oral) concluded by highlighting several of the preliminary observations made in the first issues paper (see paragraphs 190 and 218 thereof).

(b) Maritime delimitation practice of African States

259. The Co-Chair (Mr. Cissé) gave a presentation on the practice of African States regarding maritime delimitation. Since maritime delimitation was a recent process in Africa, with high stakes for coastal States, he had examined the legislative, constitutional and conventional practice of 38 African coastal States, as well as relevant judicial decisions rendered by international courts,⁴⁴⁴ in order to assess whether coastal States were supportive of ambulatory or fixed maritime limits.

260. The outcome of the survey was that, while there was some African legislative and constitutional practice on baselines and maritime borders, such practice was diverse. As such, it was not possible to infer the existence of *opinio juris* in favour of or against permanent or ambulatory baselines or maritime boundaries. There was no generalized African practice since the geography of the coasts varied, such that the justification for the use of baselines, tide (high or low), ambulatory or permanent lines was dependent on the general configuration of the coasts.

261. Nonetheless, in the view of the Co-Chair, the application of principles of public international law in the African context could favour fixed baselines or permanent maritime boundaries, for the following reasons:

(a) In the light of the principle of the immutability of borders inherited from the colonial era, in accordance with the principle of *uti possidetis juris*, it could be assumed that a maritime boundary drawn by the former colonial powers continued to apply between newly independent States without the possibility of modification;

(b) The limitation on the application of the principle of *rebus sic stantibus*, as provided for in article 62, paragraph 2, of the Vienna Convention on the Law of Treaties, namely that boundary treaties could not be affected by a fundamental change of circumstances, seemed also applicable to maritime boundaries in the light of existing case law, which had recognized that there was no need to distinguish between land and maritime boundaries. As such, sea-level rise should not, in principle, have legal consequences in terms of maintaining boundaries already delimited or baselines or base points already defined. The freezing of baselines could address that concern;

⁴⁴³ United Nations Convention on the Law of the Sea (Montego Bay, 10 December 1982), *ibid.*, vol. 1833, No. 31363, p. 3.

⁴⁴⁴ *Continental Shelf (Tunisia/Libyan Arab Jamahiriya)*, Judgment, *I.C.J. Reports 1982*, p. 18; *Continental Shelf (Libyan Arab Jamahiriya/Malta)*, Judgment, *I.C.J. Reports 1985*, p. 13; *Case concerning the delimitation of the maritime boundary between Guinea and Guinea-Bissau, Award of 14 February 1985*, United Nations, *Reports of International Arbitral Awards*, vol. XIX, part IV, pp. 149–196 (in French; English version available in *International Law Materials*, vol. 25 (1986), pp. 251–306); *Case concerning the delimitation of the maritime boundary between Guinea-Bissau and Senegal, Decision of 31 July 1989*, United Nations, *Reports of International Arbitral Awards*, vol. XX, part II, pp. 119–213; *Land and Maritime Boundary between Cameroon and Nigeria (Cameroon v. Nigeria: Equatorial Guinea intervening)*, Judgment, *I.C.J. Reports 2002*, p. 303; *Delimitation of the Maritime Boundary in the Atlantic Ocean (Ghana/Côte d’Ivoire)*, Judgment, *ITLOS Reports 2017*, p. 4; and *Maritime Delimitation in the Indian Ocean (Somalia v. Kenya)*, *Preliminary Objections, Judgment, I.C.J. Reports 2017*, p. 3.

(c) Given the obligation of States to cooperate when they are at an impasse or are having difficulty concluding an agreement on the delimitation of their maritime boundaries (recourse to article 83, paragraph 3, or article 74, paragraph 3, of the United Nations Convention on the Law of the Sea), the question of the unresolved maritime boundaries could be frozen in favour of other solutions, such as the establishment of joint development zones.

(c) Summary of the general exchange of views held during the first part of the session

(i) General comments on the topic

262. During the first part of the session, members of the Study Group presented comments on the first issues paper, in oral and written form.

263. The importance of the topic and the legitimacy of the concerns expressed by those States affected by sea-level rise, together with the need to approach the topic in full appreciation of its urgency, were emphasized. While some members stressed that sea-level rise was a modern phenomenon of the past few decades that was projected to have significant consequences – as noted in the first issues paper –, other members opined that it was not a new or a sudden phenomenon. It was also suggested that the existence and effects of two kinds of sea-level rise – natural and human-induced – should be identified and that coastlines may change as a result of natural sea-level rise and fall, or sea-level extremes, caused by earthquakes, tsunamis or other natural disasters. Referring to section III of the introduction of the first issues paper, on scientific findings and prospects of sea-level rise and their relationship with the topic, support was also expressed for treating sea-level rise as a scientifically proven fact of which the Commission could take notice for the limited purpose of its specific work on the international legal implications of sea-level rise. It was also noted that over time there are reasons other than sea-level rise that could cause a coastline to change location, as had been happening throughout history, and that any new rule justified by sea-level rise must have regard to practice in such cases and might need to identify the mechanism for distinguishing one case from another. It was also mentioned that the presumption in dealing with this topic is that this phenomenon is a result of climate change, and is as such (mainly) human-induced, while recalling that one of the limits of action by the Study Group, as outlined in the 2018 syllabus, was that the topic “does not deal with ... causation”. As a result, the Study Group ought to consider the present topic based on the premise that sea-level rise due to climate change is a fact already proven by science.

264. The immense challenge of understanding and seeking solutions to complex legal and technical issues without losing sight of their human dimension, as well as the difficulty of assessing the magnitude of the phenomenon and its consequences – including from the point of view of the law of the sea – was also underlined. Members, however, generally considered that the topic was of particular importance, and that it raised significant issues on which the Commission could shed light.

(ii) General comments on the first issues paper

265. Concerns were expressed that the first issues paper had been read as already reflecting the Commission’s views and, as a consequence of the postponement of the Commission’s seventy-second session, it had been widely discussed outside the Commission before the Commission itself had had the opportunity to consider it. It was noted that it was also due to the adoption of a procedure different than that adopted by previous study groups, which was necessitated by the urgency and importance attached to this topic. It was noted though that this was not unique to this topic, and that reports of Special Rapporteurs being referred to as the product of the Commission was a recurring problem.

266. Some members expressed support for the analysis, including the preliminary observations contained in the first issues paper, while other members expressed doubts regarding these preliminary observations. Some members agreed on the need for stability, security, certainty and predictability, and the need to preserve the balance of rights and obligations between coastal States and other States, yet did not agree on whether the first issues paper’s preliminary observations reflected those needs. Further, some members took the view that the statements by States in favour of stability, certainty and predictability could be open to different interpretations, and called into question the first issues paper’s repeated

reliance on “concerns expressed by Member States”. A view was expressed that the desire of States for “stability” was not necessarily an “indication” of *opinio juris*, as suggested by the first issues paper, to the extent that it was difficult to qualify the preference for stability as reflecting “a sense of legal right or obligation” as stated in the Commission’s conclusions on identification of customary international law.⁴⁴⁵ It was noted that the terms “stability”, “certainty” and “predictability” were referred in the jurisprudence in relation to land boundary delimitation and not maritime delimitation, where the considerations are different. It was also mentioned that they do not constitute a principle as such but a description of a phenomenon. While the Study Group welcomed the suggestion that the meaning of “legal stability” in connection with the present topic needed further clarification, including by addressing specific questions to the Member States, it was noted that the statements delivered in the Sixth Committee by the delegations of States affected by sea-level rise seemed to indicate that, by “legal stability”, they meant the need to preserve the baselines and outer limits of maritime zones.

(iii) *Consideration of views expressed in the Sixth Committee and State practice*

267. Members acknowledged that those States that had made statements on the subject had been largely supportive of the inclusion of the topic in the Commission’s programme of work. It was observed that States seemed to be generally in agreement that the outcome of the Commission’s work on the topic should not interfere with or amend the United Nations Convention on the Law of the Sea. It was also noted that the principles of certainty, security and predictability and the preservation of the balance of rights and obligations between coastal States and other States had figured prominently in the statements delivered by States during the debate of the Sixth Committee in 2019.

268. The lack of State practice, especially from certain regions of the world, was highlighted. Questions were also posed as to whether the statements by States and their submissions on State practice should be considered as giving rise to *emerging* rules, or could be considered as subsequent practice for purposes of interpretation of the relevant provisions of the United Nations Convention on the Law of the Sea. Some members questioned whether the statements by States in response to the first issues paper were adequate as evidence of State practice in favour of fixed baselines. In light of the insufficient availability of State practice, the view was also expressed that such statements by States in the Sixth Committee were important and relevant. It was further suggested that, in addition to requesting information from States, the Commission should conduct research, including reviewing the legislation of all States and the maritime zone notifications circulated by the Secretary-General under the United Nations Convention on the Law of the Sea.

(iv) *Work of the International Law Association*

269. Some members highlighted the work of the International Law Association’s Committee on Baselines under the International Law of the Sea and Committee on International Law and Sea Level Rise, suggesting that the Study Group add more detail on their work and use it as a basis for analysis. They noted that in 2012 the Committee on Baselines under the International Law of the Sea concluded that the normal baseline is ambulatory and that existing law does not offer an adequate solution to a total territorial loss, due to sea-level rise for example. It was also recalled that the subsequently established Committee on International Law and Sea Level Rise recommended that the International Law Association adopt a resolution containing *de lege ferenda* proposals that “baselines and limits should not be required to be readjusted should sea level change affect the geographic reality of the coastline”. This was endorsed by resolution 5/2018 of the Seventy-eighth Conference of the International Law Association in Sydney.⁴⁴⁶ There was also a suggestion that, like the International Law Association’s report of its 2018 Sydney Conference on International Law and Sea Level Rise, the Study Group should conduct an analysis of the advantages and disadvantages of the different options. Further, it was noted that under the United Nations

⁴⁴⁵ *Official Records of the General Assembly, Seventy-third Session, Supplement No. 10 (A/73/10)*, chapter V, section E, conclusion 9.

⁴⁴⁶ *International Law and Sea Level Rise: Report of the International Law Association Committee on International Law and Sea Level Rise*, D. Vidas, et al. (eds.), Brill, Leiden, 2019, pp. 66–67.

Convention on the Law of the Sea, the baselines had to be in line with reality. It was further observed that the Committee on Baselines under the International Law of the Sea did not see its 2012 findings as the last word as far as sea-level rise effects were concerned, and that these effects should accordingly continue to be examined by the Committee on International Law and Sea Level Rise, which, in 2018, proposed that, if the baselines and the outer limits of maritime zones of a coastal or an archipelagic State had been properly determined in accordance with the United Nations Convention on the Law of the Sea, those baselines and outer limits should not be required to be recalculated should sea-level changes affect the geographical reality of the coastline. The fact that the Commission employs a different methodology than the International Law Association, which includes a close relationship with the Sixth Committee, was also underlined.

(v) *Interpretation of the United Nations Convention on the Law of the Sea: ambulatory or fixed baselines*

270. Some members noted that the normal baseline in article 5 of the United Nations Convention on the Law of the Sea is the low-water line, which they viewed as inherently ambulatory. Other members observed that the Convention was silent on whether baselines were ambulatory or had to be regularly updated. Members agreed on the importance of and need for assessing State practice on questions relating to the freezing of baselines and the updating (or not) of charts. Some members expressed the view that baselines were not established by charts or lists, but by the detailed rules set out in the Convention and other relevant sources, that the charts and lists referred to in article 16 of the Convention only concerned straight baselines or closing lines (not normal baselines), and that the Convention expressly required that such charts and lists be produced in accordance with the rules set forth in articles 7, 9, and 10 of the Convention. The importance of making a distinction between base points (which are relevant for maritime delimitations if selected as relevant points on the relevant coasts) and baselines (which are relevant for establishing the outer limits of maritime zones) was also underlined, given that rising sea-level affects them differently, which entails that they may require different legal solutions.

271. Some members regarded article 5 of the United Nations Convention on the Law of the Sea as clear on the question of whether normal baselines were ambulatory, while other members considered that article to be susceptible to a different interpretation. It was noted that sea-level rise had not been mentioned in the *travaux préparatoires* of the Convention. Some members maintained that the Convention was fully silent on the issue of sea-level rise, including in relation to baselines and the updating of charts. Other members took the view that, even if sea-level rise was not discussed, the issue of change in the location of baselines was discussed, including the circumstances where a baseline could be fixed within specific contexts (such as deltas). It was however noted that not too much should be read into any silence, as it could be interpreted in different ways. The view was nonetheless also expressed that, consequently, the Convention was not dispositive of the question as to whether baselines were ambulatory or not. It was also mentioned, however, that the United Nations Convention on the Law of the Sea does contemplate the change of baselines due to changes in the coast, although sea-level rise was not specifically discussed.

272. In response to the diverse views expressed by members as to the existence of ambulatory or fixed or permanent baselines, there was a suggestion that the Commission should conduct additional research into whether a principle of stability existed under general international law, including a study of the law of river delimitation. It was also deemed important to closely consider the judgment rendered by the International Court of Justice in the *Maritime Delimitation in the Caribbean Sea and the Pacific Ocean (Costa Rica v. Nicaragua)* case⁴⁴⁷ in which the Court used a moving delimitation line for maritime delimitation.

273. Some members emphasized that, if ambulatory baselines were to be retained, landward movement could result in a significant loss of sovereignty and jurisdictional rights

⁴⁴⁷ *Maritime Delimitation in the Caribbean Sea and the Pacific Ocean (Costa Rica v. Nicaragua)* and *Land Boundary in the Northern Part of Isla Portillos (Costa Rica v. Nicaragua)*, Judgment, I.C.J. Reports 2018, p. 139.

for coastal States. It could also give rise to a significant loss of resources and protected maritime areas, while negatively affecting the conservation of biological diversity in areas beyond national jurisdiction. Those members commented that legal uncertainty regarding maritime boundaries would likely be a source of conflict and instability for coastal neighbouring States. It was further observed that States would have to dedicate significant resources for the purpose of regularly updating maritime charts or geographical data under an ambulatory system. Some members expressed agreement with the view of the Co-Chairs that the interpretation that baselines generally had an ambulatory character did not respond to the concerns of the States facing the effects of sea-level rise. It was thus suggested by some members that maintaining existing maritime baselines and limits was an optimal solution that responded to States' interests in connection with the effects of sea-level rise.

274. Other members were not convinced that shifting areas of maritime entitlements necessarily led to a loss of the total amount of such entitlements, as opposed to just changing their location. It was noted, also, that fixed baselines might not be required in all situations (for example, where the land surface of a State had actually increased owing to the shift of tectonic plates). The view was expressed that if baselines were fixed, States that may have their land surface increase would not be able to move their baselines seawards and claim larger areas, if they experienced such a phenomenon in the future. It was also mentioned that there may be specific situations where States facing the threat of sea-level rise may have erected coastal fortifications and may wish them to be treated as fixed baselines. As to the situation of increased land surface due to factors other than sea-level rise, it was stressed that this aspect is outside the mandate of the Study Group, which only deals with sea-level rise effects. It was also recalled that the final outcome of the Study Group should be clearly limited to sea-level rise due to climate change, according to the limits agreed to in the mandate of the Study Group.

275. Some members suggested that there might be a continuum of intermediate possibilities between the two options discussed in the first issues paper – ambulatory versus permanent baselines – that deserved a full and detailed examination. As the discussion was still of a preliminary nature, further in-depth analysis needed to be undertaken before the Study Group could take a position on what was a complex subject.

276. The issue of navigational charts was also raised, a view being expressed that updating them was important in the interests of navigational safety, while another view maintained that the potential dangers to navigation might be rather exceptional given that the coast receded landward in case of sea-level rise and that satellite technology was more accessible than ever. Support was expressed for the ensuing proposal made by the Co-Chairs that the issue of navigational charts could be subject to additional study. For example, such study could examine the different functions of navigational charts as required under the rules of the International Hydrographic Organization and of the charts that are deposited with the Secretary-General of the United Nations for purposes of registration of maritime zones.

277. Some members suggested that the Study Group take into account the possible situation where, as a result of sea-level rise and a landward shift of the coastline, the bilaterally-agreed delimitation of overlapping areas of exclusive economic zones of opposite coastal States no longer overlapped, as such a situation would result in States being trapped in an unreasonable legal fiction. Support was expressed for the examination of this hypothesis, including from the angle of concepts from the law of treaties, like obsolescence or the supervening impossibility of performance of a treaty. Another view expressed was that the preservation of existing baselines, when the natural baselines had shifted significantly, could lead to disproportionately large maritime zones – beyond what was permitted under the United Nations Convention on the Law of the Sea – which could benefit coastal States at the expense of the rights of other States or the international community. It was also agreed to examine in greater detail the possible loss or gain of benefits of third States, while it was noted that no State that had commented thus far on the topic had requested this analysis or mentioned the issue. Some members noted that, if the approach of fixed baselines were to be adopted, sea-level rise could result in large areas of internal waters that normally would be territorial sea (or even high seas), through which there would be no right of innocent passage. Similarly, fixed baselines could result in maintaining a straits regime in a channel that normally would not be a strait.

(vi) *Other sources of international law*

278. Some members expressed the view that, while the United Nations Convention on the Law of the Sea was a key source for its States parties, other sources should be analysed further. It was also recalled that, according to the preamble of the Convention, matters not regulated by the Convention continued to be governed by the rules and principles of general international law. Since the legal problems arising as a consequence of sea-level rise could not be fully addressed within the regime of the Convention, it was suggested that other relevant rules of general international law should be considered. Other members noted that the matter was covered by article 5 of the Convention. Such other sources included, notably, customary international law, the 1958 Geneva Conventions⁴⁴⁸ and other multilateral and bilateral instruments concerning a whole range of aspects of the law of the sea and involving different zones that could be affected by sea-level rise. Some members suggested that other principles and rules also be examined in more detail, such as the principle that the land dominates the sea and the principle of freedom of the seas, as well as the role of the principle of equity, good faith, historic rights and title, the obligation to settle disputes peacefully, the maintenance of international peace and security, the protection of the rights of coastal States and non-coastal States, and the principle of permanent sovereignty over natural resources. The Study Group accordingly intends to follow up on these suggestions in its further work on the topic.

(vii) *Permanency of the exclusive economic zone and the continental shelf*

279. Some members raised specific questions concerning the relationship between the proposal of permanency of the continental shelf and the exclusive economic zone in relation to the reference, in the first issues paper, to a discrepancy that could emerge between the permanent outer limits of the continental shelf and possible ambulatory outer limits of the exclusive economic zone. A view was expressed that certain statements in the first issues paper regarding the permanency of the continental shelf were incorrect.

280. According to this view, there was no permanency: the argument made in the issues paper was premised on the identification of the continental shelf based on the geographical criteria; however, up to 200 nm, it is only the distance criteria that is applied, while, as per this view, the outer limits of the continental shelf and the exclusive economic zone depend on the location of baselines. Thus, it was argued, permanency of baselines cannot be asserted based on the continental shelf being the natural prolongation of the land territory.

(viii) *Sea-level rise and article 62, paragraph 2, of the Vienna Convention on the Law of Treaties*

281. Some members noted that maritime treaties and adjudicated boundaries should be final, while commenting that additional study was necessary. The relevance of the principle of *pacta sunt servanda* was noted. Several members commented on article 62 of the Vienna Convention on the Law of Treaties and the question as to whether sea-level rise would constitute an unforeseen change of circumstances. A number of members noted that there should be no distinction in that regard between land and maritime boundaries, as reflected in the international jurisprudence cited in the first issues paper. Other members were more reserved and considered that additional study should be undertaken on the issue, including an analysis of the pros and cons of each view. Support was expressed for this suggestion and it was recalled that on this matter doctrine and the 2018 conclusions of the International Law Association Committee on International Law and Sea Level Rise lean towards establishing that changes in land and maritime boundaries should not constitute an unforeseen change of circumstances. Some members noted that land boundaries are sometimes ambulatory, dependent upon the location of bank of a river or lake, the median point of a river or lake, or a river's thalweg, while a view was expressed that State practice has a different trend: in the case where the river flow is changed, the agreed river boundary is kept permanently. A view

⁴⁴⁸ Convention on the Territorial Sea and the Contiguous Zone (Geneva, 29 April 1958), United Nations, *Treaty Series*, vol. 516, No. 7477, p. 205; Convention on the High Seas (Geneva, 29 April 1958), *ibid.*, vol. 450, No. 6465, p. 11; Convention on the Continental Shelf (Geneva, 29 April 1958), *ibid.*, vol. 499, No. 7302, p. 311; and Convention on Fishing and Conservation of the Living Resources of the High Seas (Geneva, 29 April 1958), *ibid.*, vol. 559, No. 8164, p. 285.

was expressed that whether maritime delimitation treaties were covered by article 62 was a matter of treaty interpretation, and that it was a matter for international courts and tribunals, and not for the Commission since that would be beyond its mandate. A point was also raised regarding the non-binding nature of bilateral maritime boundary agreements upon third States, which would therefore not be required to recognize agreements establishing or fixing maritime delimitation boundaries. Another view stated that maritime agreements establishing boundaries and fixing limits were treaties entered upon in accordance with the Vienna Convention on the Law of Treaties and are binding upon all States. This is without prejudice to the obligation of parties to such treaties to take due account of the legitimate rights of third States in regard to their maritime entitlements in accordance with the United Nations Convention on the Law of the Sea. It was noted that the matter needed to be further examined, including from the perspective of objective regimes in international law. It was also suggested that the Study Group examine the issue of the consequences for a maritime boundary if an agreed land boundary terminus ended up being located out at sea because of sea-level rise.

(ix) *Islands, artificial islands and rocks*

282. Some members called for caution in addressing the topic of islands under article 121 of the United Nations Convention on the Law of the Sea. Other members expressed the view that more attention should have been given to the arbitral award in *The South China Sea Arbitration between the Republic of the Philippines and the People's Republic of China*⁴⁴⁹ on the issue of the status of islands under article 121 and the reasons for according to them maritime entitlements, while the need for a critical analysis of that award was also expressed. The view was expressed that artificial fortifications dedicated exclusively to preservation from sea-level rise did not render a natural island artificial. However, a point was raised on the need for clearer guidelines to distinguish between the construction of artificial islands for the purpose of preservation from the construction of artificial islands to create artificial entitlements. A view was expressed that coastal fortifications should not be abused to make extensive maritime entitlements. A question was posed as to whether the observations in the first issues paper were limited to sea-level rise or had a more general application. A question was also raised as to whether “rocks” that become submerged should continue to enjoy maritime entitlements. It was suggested that freezing the status of an island should not be a general rule, given that its inundation could be the result of reasons not related to sea-level rise. The Study Group considered that additional research into this area could be conducted to ascertain whether such distinction could be made scientifically and how significant a certain factor was to its study. The high cost of artificial preservation of baselines and coastal areas was also highlighted.

(d) **Concluding remarks at the end of the first part of the session**

283. Members made a number of suggestions with regard to the Study Group's future work and working methods.

284. Suggestions were made regarding the title of the topic⁴⁵⁰ and the structure of the first issues paper. The Study Group considered that the issue regarding the title of the topic could be examined at a later stage. It also welcomed the suggestions on the structure of the first issues paper, as well as the ones on bibliography. The suggestion for a study of State legislation on baselines to be elaborated, with the support of the Secretariat, was also welcomed by the Study Group. It was also suggested that the first issues paper be included in volume II, Part One, of the *Yearbook of the International Law Commission*.

285. Recalling that the mandate of the Study Group was to undertake a mapping exercise of the legal implications of sea-level rise, which might require follow-up but would not lead to the development of any specific guidelines or articles, some members suggested that, to preserve its credibility, the Study Group – and the Commission – ought to be clear and

⁴⁴⁹ *The South China Sea Arbitration between the Republic of the Philippines and the People's Republic of China, Award of 12 July 2016*, Arbitral Tribunal, Permanent Court of Arbitration, United Nations, *Reports of International Arbitral Awards*, vol. XXXIII, p. 166.

⁴⁵⁰ These suggestions included a proposal to amend the title of the topic to read: “Sea-level rise and international law”.

transparent from the beginning in distinguishing between *lex lata*, *lex ferenda* and policy options. It was also suggested that the Commission should be fully guided by its own prior work relevant to the topic, such as its conclusions on identification of customary international law and its conclusions on subsequent agreements and subsequent practice in relation to the interpretation of treaties. The preliminary character of the first issues paper and the need to respect the mandate of the Study Group to perform “a mapping exercise of the legal questions raised by sea-level rise and its interrelated issues” were stressed; it was also emphasized that only at a later stage, after the Study Group had deepened its analysis, and taking into account the views of its members, could conclusions be drawn.

286. Conversely, the view was expressed that, given the importance of the subject, the topic should be considered by a special rapporteur, rather than by a study group, to ensure transparency and to allow the Commission to take a position in relation to draft texts, rather than undertaking thematic studies. In that regard, it was also suggested that co-special rapporteurs could be appointed with a view to concluding a set of draft articles that could be presented to States for the negotiation of a global framework convention on the legal consequences of sea-level rise, in accordance with article 23 of the Commission’s statute.

287. The methodological approach of the Study Group was also deemed to have important consequences for the outcome of the topic, considering that such an approach might allow the Commission to be more creative with proposing solutions for States to deliberate on a topic that would become increasingly important for the peace, security and stability of the international community. The view was expressed that any conclusions reached by the Commission could provide States, especially those particularly affected by sea-level rise, with practical legal solutions that would preserve their rights and entitlements under the law of the sea, by explaining existing rules and proposing new ones where lacunae existed. It would then be for States and the international community as a whole to decide to adopt such rules, whether through practice, negotiations, international resolutions or agreements on relevant legal instruments.

288. Some members recommended a cautious approach to avoid rushing to early conclusions. Referring to the chapter on scientific findings, support was expressed for treating sea-level rise as a scientifically proven fact of which the Commission could take notice for the limited purpose of its specific work on the international legal implications of sea-level rise. In that regard, it was recalled that the mandate of the Study Group excluded causation, the premise of the work on the topic being that sea-level rise due to climate change was to be taken as a scientifically proven fact. At the same time, if needed, the Study Group could consider inviting scientific experts to future meetings of the Study Group.

(e) Outcome of the interactive discussion held during the second part of the session

289. During the first meeting of the Study Group during the second part of the session, held on 6 July 2021, the Co-Chairs responded to comments made by members of the Study Group during the first part, and introduced a draft interim report, an English version of which had been circulated to all members on 2 July 2021, followed by all other language versions on 5 July 2021.

290. During the interactive discussion that followed, members had a debate on the working methods of the Study Group. Some members expressed concern that the Co-Chairs’ first issues paper ([A/CN.4/740](#) and [Corr.1](#) and [Add.1](#)) may have been interpreted as being of the Study Group as a whole. The time constraints under which the Study Group was operating, as well as the need for a collective and consultative process, were also underlined. Some members further suggested that, given the importance of the topic, it might be preferable for the Commission to consider following its regular procedure, appointing one or several special rapporteurs on the topic, so as to allow for more transparency while being in a position to take into account the position of States through a system of first and second readings of draft texts. Questions were also raised about the foreseen outcome of the work of the Study Group.

291. In that regard, the Co-Chairs expressed the view that they had proceeded in accordance with the methods of work that the Commission had agreed upon in 2019.⁴⁵¹ In their view, these methods of work had been deliberately tailored to be more formal than those followed by previous study groups, and appeared to be hybrid between the special rapporteur format and traditional study groups. They welcomed the contributions made by members and emphasized the need for a collective product. It was noted that the current year's debate consisted in a "mapping exercise" conducted on the basis of the first issues paper and the preliminary observations included therein, and that substantial further research was required for the Study Group to complete its task on the aspects of the law of the sea related to the topic. Members were accordingly invited by the Co-Chairs to take the lead on the various subjects that the Study Group would collectively investigate, some of which had already been suggested during the exchange of views held in the first part of the session.

292. The foreseen outcome of the Study Group's work, as outlined during the first part of the session, was also recalled.⁴⁵² It was also suggested that the Study Group should, in parallel, continue to pursue progress on aspects related to the law of the sea.

293. In concluding their exchange on the Study Group's working methods, members agreed that the interim report encapsulating the main points of the debate held during the session would, once finalized and agreed upon by the Study Group, be presented to the Commission by the Co-Chairs for the purpose of inclusion as a chapter of the annual report of the Commission.

294. The Study Group then elected to have a substantive discussion on the topic on the basis of questions prepared by the Co-Chairs in follow up to the debate held during the first part of the session.⁴⁵³ As an outcome of this discussion, the Study Group identified the

⁴⁵¹ *Official Records of the General Assembly, Seventy-fourth Session, Supplement No. 10 (A/74/10)*, paras. 265–273. See also paragraphs 245 and 246 above.

⁴⁵² See also paragraph 0296 below.

⁴⁵³ The guiding questions proposed by the Co-Chairs were as follows: (1) What other sources of law should the Study Group examine in relation to the topic? For example, it was suggested that, in addition to the United Nations Convention on the Law of the Sea, there are other "treaties to be considered, multilateral and bilateral, concerning a whole range of aspects of the law of the sea, involving different zones that could be affected by sea-level rise. These treaties need to be interpreted, including in the light of subsequent practice." Beyond the 1958 Geneva Conventions, such treaties need to be identified. It was also suggested that the Study Group look to other rules of general international law that can be relevant in the new context. Indeed, this would be an important issue to examine. From this perspective, the Co-Chairs would appreciate an indication on which such other rules could be. It was further suggested that the Study Group examine norms of international customary law not included in the United Nations Convention on the Law of the Sea, so it would be very useful to point out which such norms should be taken into account; (2) What specific aspects of the question of charts and navigation maps should be examined and how? (3) Is there a need for additional scientific input into the work of the Study Group? Which aspects and how to reconcile examining different causes of sea-level rise and effects with the limitation of the mandate that the Study Group cannot examine "causation"?; (4) Is there a need for more technical studies of the impacts of sea-level rise on baselines, outer limits of maritime zones measured therefrom, and offshore features? If so, how should this be done? Should the Study Group examine different scenarios from a purely technical perspective?; (5) Should the Study Group engage in an analysis of sea-level rise as suggested by a member who expressed an interest for a "discussion of the interests of those States that stand to gain from sea-level rise due to the loss by other States of their existing rights and the increase of the surface area of the high seas"?; (6) On the issue of legal stability and predictability, the question was raised as to whether it deserves more thorough discussion. The question is which aspects should this be studied and how?; (7) Several members invoked the principle of equity, an issue also raised by many States. Should equity be an important factor for the Study Group to take into account in its analysis of the consequences of sea-level rise and finding solutions? What is understood by "equity" by the Study Group? What other policy considerations could be considered in favour of the preservation of baselines over ambulatory or vice versa (points raised by two members)?; (8) It was suggested that there may be "a continuum of possibilities" between the options (ambulatory/permanency approaches) and all of them should be explored. The Co-Chairs would appreciate an indication on what such possibilities could be; (9) As suggested by a member, should the Study Group engage in examining ways in which "to distinguish the construction of

following issues as areas for further in-depth analysis on which it would focus on a priority basis in the near future. These studies would be undertaken on a voluntary basis by members of the Study Group:

(a) *Sources of law*: in addition to the United Nations Convention on the Law of the Sea⁴⁵⁴ (in particular, the genesis and interpretation of its article 5), the 1958 Geneva Conventions⁴⁵⁵ (and their *travaux préparatoires*), as well as customary international law of a universal and regional scope, the Study Group would examine other sources of law – relevant multilateral, regional and bilateral treaties or other instruments relating, for example, to fisheries management or the high seas that define maritime zones, or the 1959 Antarctic Treaty⁴⁵⁶ and its 1991 Protocol on Environmental Protection,⁴⁵⁷ the International Maritime Organization’s treaties defining pollution or search and rescue zones, or the 2001 Convention on the Protection of the Underwater Cultural Heritage,⁴⁵⁸ general principles of law, as well as the regulations of relevant international organizations such as the International Hydrographic Organization. The purpose of this examination would be to determine the *lex lata* in relation to baselines and maritime zones, without prejudice to the consideration of the *lex ferenda* or policy options. It would also aim at assessing whether these instruments permit or require (or not) the adjustment of baselines in certain circumstances, and whether a change of baselines would entail a change of maritime zones;

(b) *Principles and rules of international law*: the Study Group would examine various principles and rules of international law in more detail, such as the principle that the land dominates the sea, the principle of the immutability of borders, the principle of *uti possidetis juris*, the principle of *rebus sic stantibus*, or the principle of freedom of navigation, as well as the role of the principle of equity, the principle of good faith, historic rights and title, the obligation to settle disputes peacefully, the maintenance of international peace and security, the protection of the rights of coastal States and non-coastal States, and the principle of permanent sovereignty over natural resources;

(c) *Practice and opinio juris*: the Study Group would aim to extend its study of State practice and *opinio juris* to regions for which scarce, if any, information had been made available, including Asia, Europe and Latin America (one member of the Study Group already assumed the task to perform such analysis for this region) and continuing the work on Africa. In doing so, the Study Group would examine the interrelation between State

artificial islands for preservation from that to create artificial entitlement”?; (10) Several members indicated the need to study further article 62 of Vienna Convention on the Law of Treaties (*rebus sic stantibus*) and whether it would apply to maritime boundaries agreed to by treaties. In addition to the impacts of sea-level rise on valid maritime boundary agreements, another issue for the consideration of the Study Group could be the impact of sea-level rise in an ambulatory baseline scenario to maritime delimitation cases that have been adjudicated by the International Court of Justice, the International Tribunal for the Law of the Sea or arbitral tribunals. Would the principle of *res judicata* apply? What other principles might apply? Or would there be an obligation to re-open settled cases? What impact would this have on “stability, security and predictability”?; (11) How to approach the issue of the effects of sea-level rise on existing claims to the entitlement to maritime spaces in the case of future maritime delimitations (see paragraph 141 (f) of the first issues paper)?; (12) What would be the benefits of conducting a study on the law of river delimitations as proposed by a member?; (13) Should the Study Group develop a list of priority issues to be examined?; (14) Questions to the Co-Chair who reviewed the practice and laws of African States for further study; and (15) Study of practice of other regions (Asia, Europe, Latin America) needed. The Co-Chairs would appreciate members assuming such tasks (as already performed by two members).

⁴⁵⁴ United Nations, *Treaty Series*, vol. 1833, No. 31363, p. 3.

⁴⁵⁵ Convention on the Territorial Sea and the Contiguous Zone (Geneva, 29 April 1958), United Nations, *Treaty Series*, vol. 516, No. 7477, p. 205; Convention on the High Seas (Geneva, 29 April 1958), *ibid.*, vol. 450, No. 6465, p. 11; Convention on the Continental Shelf (Geneva, 29 April 1958), *ibid.*, vol. 499, No. 7302, p. 311; and Convention on Fishing and Conservation of the Living Resources of the High Seas (Geneva, 29 April 1958), *ibid.*, vol. 559, No. 8164, p. 285.

⁴⁵⁶ The Antarctic Treaty (Washington D.C., 1 December 1959), United Nations, *Treaty Series*, vol. 402, No. 5778, p. 71.

⁴⁵⁷ Protocol on Environmental Protection to the Antarctic Treaty (Madrid, 4 October 1991), *ibid.*, vol. 2941, p. 3.

⁴⁵⁸ Convention on the Protection of the Underwater Cultural Heritage (Paris, 12 November 2001), *ibid.*, vol. 2562, part I, No. 45694, p. 3.

practice and sources of law by assessing whether such practice is relevant to customary international law or whether it is pertinent to treaty interpretation. The Study Group would also examine the maritime zone notifications deposited with the Secretary-General of the United Nations and the national legislation accessible on the website of the Division of the Law of the Sea and Ocean Affairs of the Office of Legal Affairs to determine whether States do – or do not – update such notifications and laws;

(d) *Navigational charts*: Further to the study mentioned in paragraph 37 above, the Study Group would also consider suggestions that take into account the operational considerations and circumstances as well as practices of States as far as the updating of navigational charts.

295. Members of the Study Group also agreed that the Study Group might call upon scientific and technical experts to assist them in their task, on the understanding that they would do so in a selective, useful and limited manner.

(f) Future work of the Study Group

296. With regard to the future programme of work, the Study Group will address issues related to statehood and to the protection of persons affected by sea-level rise, under the co-chairpersonship of Ms. Patrícia Galvão Teles and Mr. Juan José Ruda Santolaria, who will prepare a second issues paper as a basis for the discussion in the Study Group at the seventy-third session. The Study Group would then seek to finalize a substantive report on the topic, in the first two years of the following quinquennium, by consolidating the results of the work undertaken during the seventy-second and seventy-third sessions of the Commission.