

## Chapter VI

### PROTECTION OF THE ATMOSPHERE

#### A. Introduction

57. At its sixty-fifth session (2013), the Commission decided to include the topic “Protection of the atmosphere” in its programme of work, subject to an understanding, and appointed Mr. Shinya Murase as Special Rapporteur.<sup>657</sup>

58. The Commission received and considered the first report of the Special Rapporteur at its sixty-sixth session (2014); the second report at its sixty-seventh session (2015); and the third report at its sixty-eighth session (2016).<sup>658</sup> On the basis of the draft guidelines proposed by the Special Rapporteur in the second and third reports, the Commission provisionally adopted eight draft guidelines and five preambular paragraphs, together with commentaries thereto.<sup>659</sup>

#### B. Consideration of the topic at the present session

59. At the present session, the Commission had before it the fourth report of the Special Rapporteur (A/CN.4/705). The Special Rapporteur analysed several key issues that he considered relevant to the topic, in particular, the interrelationship between international law on the protection of the atmosphere and other fields of international law, namely international trade and investment law, the law of the sea and international human rights law. The Special Rapporteur argued that the international law on the

protection of the atmosphere existed as such and functioned in interrelationship with other relevant fields of international law, most notably international trade and investment law, the law of the sea and human rights law. Those fields of international law had intrinsic links with the law related to the protection of the atmosphere itself. Accordingly, there was a need to treat those fields in an integrated manner within the scope of the present topic. In view of the analysis, the Special Rapporteur proposed four additional draft guidelines on: the guiding principles on interrelationship (draft guideline 9); the interrelationship between the law on the protection of the atmosphere and international trade and investment law (draft guideline 10); the interrelationship of law on the protection of the atmosphere with the law of the sea (draft guideline 11); and the interrelationship of law on the protection of the atmosphere with human rights law (draft guideline 12).

60. The Special Rapporteur indicated that in 2018 he expected to address (a) implementation (at the level of national law); (b) compliance (at the level of international law); and (c) specific features of dispute settlement related to the law on the protection of the atmosphere. He also hoped to conclude the first reading of the draft guidelines.

61. The Commission considered the fourth report of the Special Rapporteur at its 3355th to 3359th meetings, on 10, 11, 12, 16 and 17 May 2017, respectively.

62. The plenary debate was preceded by a dialogue with scientists organized by the Special Rapporteur on 4 May 2017.<sup>660</sup> Members of the Commission found the dialogue and the contributions useful.

63. Following its debate on the report, the Commission, at its 3359th meeting, on 17 May 2017, decided to refer draft guidelines 9 to 11, as contained in the Special Rapporteur’s fourth report, to the Drafting Committee, taking into account the debate in the Commission.

<sup>657</sup> At its 3197th meeting, on 9 August 2013 (see *Yearbook ... 2013*, vol. II (Part Two), para. 168), the Commission included the topic in its programme of work on the understanding that: “(a) work on the topic will proceed in a manner so as not to interfere with relevant political negotiations, including on climate change, ozone depletion and long-range transboundary air pollution. The topic will not deal with, but is also without prejudice to, questions such as liability of States and their nationals, the polluter pays principle, the precautionary principle, common but differentiated responsibilities and the transfer of funds and technology to developing countries, including intellectual property rights; (b) the topic will also not deal with specific substances, such as black carbon, tropospheric ozone and other dual-impact substances, which are the subject of negotiations among States. The project will not seek to ‘fill’ gaps in the treaty regimes; (c) questions relating to outer space, including its delimitation, are not part of the topic; (d) the outcome of work on the topic will be draft guidelines that do not seek to impose on current treaty regimes legal rules or legal principles not already contained therein. The Special Rapporteur’s reports would be based on such an understanding.” The General Assembly, in paragraph 6 of its resolution 68/112 of 16 December 2013, took note of the decision of the Commission to include the topic in its programme of work. The topic had been included in the long-term programme of work of the Commission during its sixty-third session (2011), on the basis of the proposal contained in annex II to the report of the Commission on the work of that session (*Yearbook ... 2011*, vol. II (Part Two), para. 365 and pp. 189–197).

<sup>658</sup> *Yearbook ... 2014*, vol. II (Part One), document A/CN.4/667; *Yearbook ... 2015*, vol. II (Part One), document A/CN.4/681; and *Yearbook ... 2016*, vol. II (Part One), document A/CN.4/692, respectively.

<sup>659</sup> *Yearbook ... 2015*, vol. II (Part Two), paras. 53–54; and *Yearbook ... 2016*, vol. II (Part Two), paras. 95–96.

<sup>660</sup> The dialogue with scientists on the protection of the atmosphere was chaired by Mr. Shinya Murase, Special Rapporteur. The dialogue included the following presentations: “Overview: ocean and the atmosphere” by Mr. Øystein Hov, President of the Commission for Atmospheric Sciences, World Meteorological Organization; “Transboundary air pollution, the United Nations Economic Commission for Europe” by Mr. Peringe Grennfelt, former Chairperson of the Working Group on Effects, Convention on Long-range Transboundary Air Pollution, Economic Commission for Europe; “Linkages between the oceans and the atmosphere” by Mr. Tim Jickells, Co-Chairperson of Working Group 38 of the Joint Group of Experts on the Scientific Aspects of Marine Environmental Protection, World Meteorological Organization; and “Linking science with law for the protection of the atmosphere” by Mr. Arnold Kreilhuber, Head of the International Environmental Law Unit, Division of Environmental Law and Conventions, United Nations Environment Programme (UNEP). The dialogue was followed by a question and answer session. The summary of the informal dialogue is available from the website of the Commission.

64. At its 3367th meeting, on 2 June 2017, the Commission considered the report of the Drafting Committee and provisionally adopted three preambular paragraphs and draft guideline 9 (see section C.1 below).

65. At its 3386th and 3387th meetings, on 2 and 3 August 2017, the Commission adopted the commentaries to the draft preambular paragraphs and draft guideline 9 provisionally adopted at the present session (see section C.2 below).

### C. Text of the draft guidelines on the protection of the atmosphere, together with preambular paragraphs, provisionally adopted so far by the Commission

#### 1. TEXT OF THE DRAFT GUIDELINES, TOGETHER WITH PREAMBULAR PARAGRAPHS

66. The text of the draft guidelines on the protection of the atmosphere, together with preambular paragraphs, provisionally adopted so far by the Commission is reproduced below.

##### *Preamble*

...

*Acknowledging* that the atmosphere is essential for sustaining life on Earth, human health and welfare, and aquatic and terrestrial ecosystems,

*Bearing in mind* that the transport and dispersion of polluting and degrading substances occur within the atmosphere,

*Noting* the close interaction between the atmosphere and the oceans,

*Recognizing* therefore that the protection of the atmosphere from atmospheric pollution and atmospheric degradation is a pressing concern of the international community as a whole,

*Aware* of the special situation and needs of developing countries,

*Aware also*, in particular, of the special situation of low-lying coastal areas and small island developing States due to sea-level rise,

*Noting* that the interests of future generations of humankind in the long-term conservation of the quality of the atmosphere should be fully taken into account,

*Recalling* that these draft guidelines are not to interfere with relevant political negotiations, including those on climate change, ozone depletion, and long-range transboundary air pollution, and that they also neither seek to “fill” gaps in treaty regimes nor impose on current treaty regimes legal rules or legal principles not already contained therein,

[Some other paragraphs may be added and the order of paragraphs may be coordinated at a later stage.]

...

##### *Guideline 1. Use of terms*

For the purposes of the present draft guidelines:

(a) “atmosphere” means the envelope of gases surrounding the Earth;

(b) “atmospheric pollution” means the introduction or release by humans, directly or indirectly, into the atmosphere of substances contributing to deleterious effects extending beyond the State of origin of such a nature as to endanger human life and health and the Earth’s natural environment;

(c) “atmospheric degradation” means the alteration by humans, directly or indirectly, of atmospheric conditions having significant deleterious effects of such a nature as to endanger human life and health and the Earth’s natural environment.

##### *Guideline 2.<sup>661</sup> Scope of the guidelines*

1. The present draft guidelines [contain guiding principles relating to] [deal with] the protection of the atmosphere from atmospheric pollution and atmospheric degradation.

2. The present draft guidelines do not deal with, but are without prejudice to, questions concerning the polluter pays principle, the precautionary principle, common but differentiated responsibilities, the liability of States and their nationals, and the transfer of funds and technology to developing countries, including intellectual property rights.

3. The present draft guidelines do not deal with specific substances, such as black carbon, tropospheric ozone and other dual-impact substances, which are the subject of negotiations among States.

4. Nothing in the present draft guidelines affects the status of airspace under international law nor questions related to outer space, including its delimitation.

##### *Guideline 3. Obligation to protect the atmosphere*

States have the obligation to protect the atmosphere by exercising due diligence in taking appropriate measures, in accordance with applicable rules of international law, to prevent, reduce or control atmospheric pollution and atmospheric degradation.

##### *Guideline 4. Environmental impact assessment*

States have the obligation to ensure that an environmental impact assessment is undertaken of proposed activities under their jurisdiction or control which are likely to cause significant adverse impact on the atmosphere in terms of atmospheric pollution or atmospheric degradation.

##### *Guideline 5. Sustainable utilization of the atmosphere*

1. Given that the atmosphere is a natural resource with a limited assimilation capacity, its utilization should be undertaken in a sustainable manner.

2. Sustainable utilization of the atmosphere includes the need to reconcile economic development with protection of the atmosphere.

##### *Guideline 6. Equitable and reasonable utilization of the atmosphere*

The atmosphere should be utilized in an equitable and reasonable manner, taking into account the interests of present and future generations.

##### *Guideline 7. Intentional large-scale modification of the atmosphere*

Activities aimed at intentional large-scale modification of the atmosphere should be conducted with prudence and caution, subject to any applicable rules of international law.

##### *Guideline 8 [5].<sup>662</sup> International cooperation*

1. States have the obligation to cooperate, as appropriate, with each other and with relevant international organizations for the protection of the atmosphere from atmospheric pollution and atmospheric degradation.

2. States should cooperate in further enhancing scientific knowledge relating to the causes and impacts of atmospheric pollution and atmospheric degradation. Cooperation could include exchange of information and joint monitoring.

<sup>661</sup> The alternative formulations in brackets will be subject to further consideration.

<sup>662</sup> The draft guideline was renumbered at the sixty-eighth session. The original number appears in square brackets.

*Guideline 9. Interrelationship among relevant rules*

1. The rules of international law relating to the protection of the atmosphere and other relevant rules of international law, including *inter alia* the rules of international trade and investment law, of the law of the sea and of international human rights law, should, to the extent possible, be identified, interpreted and applied in order to give rise to a single set of compatible obligations, in line with the principles of harmonization and systemic integration, and with a view to avoiding conflicts. This should be done in accordance with the relevant rules set forth in the Vienna Convention on the Law of Treaties of 1969, including articles 30 and 31, paragraph 3 (c), and the principles and rules of customary international law.

2. States should, to the extent possible, when developing new rules of international law relating to the protection of the atmosphere and other relevant rules of international law, endeavour to do so in a harmonious manner.

3. When applying paragraphs 1 and 2, special consideration should be given to persons and groups particularly vulnerable to atmospheric pollution and atmospheric degradation. Such groups may include, *inter alia*, indigenous peoples, people of the least developed countries and people of low-lying coastal areas and small island developing States affected by sea-level rise.

2. TEXT OF THE DRAFT GUIDELINE, TOGETHER WITH PREAMBULAR PARAGRAPHS, AND COMMENTARIES THERETO PROVISIONALLY ADOPTED BY THE COMMISSION AT ITS SIXTY-NINTH SESSION

67. The text of the draft guideline, together with preambular paragraphs, and commentaries thereto provisionally adopted by the Commission at its sixty-ninth session is reproduced below.

*Preamble*

...

**Noting the close interaction between the atmosphere and the oceans,**

...

*Commentary*

(1) This preambular paragraph acknowledges the “close interaction” that arises, as a factual matter, from the physical relationship between the atmosphere and the oceans. A significant proportion of the pollution of the marine environment from or through the atmosphere originates from land-based sources, including from anthropogenic activities on land.<sup>663</sup> Human activities are also responsible for global warming, which causes a rise in temperature of the oceans and in turn results in extreme atmospheric conditions of flood and drought.<sup>664</sup> In its resolution 71/257

<sup>663</sup> See R. A. Duce and others, “The atmospheric input of trace species to the world ocean”, *Global Biogeochemical Cycles*, vol. 5, No. 3 (1991), pp. 193–259; and T. Jickells and C. M. Moore, “The importance of atmospheric deposition for ocean productivity”, *Annual Review of Ecology, Evolution, and Systematics*, vol. 46 (2015), pp. 481–501.

<sup>664</sup> According to the Intergovernmental Panel on Climate Change (IPCC), “Ocean warming dominates the increase in energy stored in the climate system, accounting for more than 90% of the energy accumulated between 1971 and 2010 (*high confidence*), with only about 1% stored in the atmosphere. On a global scale, the ocean warming is largest near the surface, and the upper 75 m warmed by 0.11 [0.09 to 0.13] °C per decade over the period 1971 to 2010. It is *virtually certain* that the upper ocean (0–700 m) warmed from 1971 to 2010, and it *likely* warmed between the 1870s and 1971” (IPCC, *Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Geneva, 2014, p. 4; available from <https://archive.ipcc>

of 23 December 2016, the General Assembly confirmed the effect of climate change on oceans and stressed the importance of increasing the scientific understanding of the oceans-atmosphere interface.<sup>665</sup>

(2) In 2015, the first Global Integrated Marine Assessment (first World Ocean Assessment) was completed as a comprehensive, in-depth study on the state of the marine environment, including a chapter addressing in part the substances polluting the oceans from land-based sources through the atmosphere.<sup>666</sup> The summary of the report was approved by the General Assembly at its seventieth session.<sup>667</sup>

(3) Among the various human activities that have an impact on the oceans, greenhouse gas emissions from ships contribute to global warming and climate change. The 2009 study by the International Maritime Organization (IMO) on greenhouse gas emissions classified such emissions from ships into four categories, namely: emissions of exhaust gases, cargo emissions, emissions of refrigerants and other emissions.<sup>668</sup> Research indicates that excessive greenhouse gas emissions from ships change the composition of the atmosphere and climate, and cause a negative impact on the marine environment and human health.<sup>669</sup>

[ch/pdf/assessment-report/ar5/syr/SYR\\_AR5\\_FINAL\\_full\\_wcover.pdf](https://www.un.org/legal/informal_dialogue_4may2017.pdf)). Because of the rise in ocean temperatures, many scientific analyses suggest a risk of severe and widespread drought in the twenty-first century over many land areas. See S. K. Min and others, “Human contribution to more-intense precipitation extremes”, *Nature*, vol. 470 (2011), pp. 378–381; A. Dai, “Increasing drought under global warming in observations and models”, *Nature Climate Change*, vol. 3, No. 1 (2013), pp. 52–58; and J. Sheffield, E. F. Wood and M. L. Roderick, “Little change in global drought over the past 60 years”, *Nature*, vol. 491 (2012), pp. 435–438. See also Ø. Hov, “Overview: ocean and the atmosphere”, and T. Jickells, “Linkages between the oceans and the atmosphere”, in “Summary of the informal meeting of the International Law Commission: dialogue with atmospheric scientists (third session), 4 May 2017”, paras. 4–12 and 21–30, respectively. Available from [https://legal.un.org/ilc/sessions/69/pdfs/english/informal\\_dialogue\\_4may2017.pdf](https://legal.un.org/ilc/sessions/69/pdfs/english/informal_dialogue_4may2017.pdf).

<sup>665</sup> General Assembly resolution 71/257 of 23 December 2016 on oceans and the law of the sea, paras. 185–196 and 279.

<sup>666</sup> Division for Ocean Affairs and the Law of the Sea, “First global integrated marine assessment (first World Ocean Assessment)”. Available from [www.un.org/depts/los/global\\_reporting/WOA\\_RegProcess.htm](http://www.un.org/depts/los/global_reporting/WOA_RegProcess.htm) (see, in particular, chapter 20, “Coastal, riverine and atmospheric inputs from land”).

<sup>667</sup> General Assembly resolution 70/235 of 23 December 2015.

<sup>668</sup> Ø. Buhaug and others, *Second IMO GHG Study 2009*, London, IMO, 2009, p. 23. See also T. W. P. Smith and others, *Third IMO GHG Study 2014*, London, IMO, 2015, executive summary, table 1; and M. Righi, J. Hendricks and R. Sausen, “The global impact of the transport sectors on atmospheric aerosol in 2030—Part I: land transport and shipping”, *Atmospheric Chemistry and Physics*, vol. 15 (2015), pp. 633–651.

<sup>669</sup> Most of the greenhouse gas emissions from ships are emitted in or transported to the marine boundary layer, where they affect atmospheric composition. See, e.g., V. Eyring and others, “Transport impacts on atmosphere and climate: shipping”, *Atmospheric Environment*, vol. 44, No. 37 (2010), pp. 4735–4771, at pp. 4735, 4744–4745 and 4752–4753. The Fifth Assessment Report of the Intergovernmental Panel on Climate Change asserted that greenhouse gas emissions have led to global ocean warming, the rise of ocean temperatures and ocean acidification (IPCC, *Climate Change 2014 ...* (see footnote 664 above), pp. 40–42); see also D. E. J. Currie and K. Wolk, “Climate change and CO<sub>2</sub> in the oceans and global oceans governance”, *Carbon and Climate Law Review*, vol. 3, No. 4 (2009), pp. 387–404, at pp. 387 and 389; C. Schofield, “Shifting limits? Sea level rise and options to secure maritime jurisdictional claims”, *ibid.*, pp. 405–416; and S. R. Cooley and J. T. Mathis, “Addressing ocean acidification as part of sustainable ocean development”, *Ocean Yearbook*, vol. 27 (2013), pp. 29–47.

(4) The General Assembly has continued to emphasize the urgency of addressing the effects of atmospheric degradation, such as increases in global temperatures, sea-level rise, ocean acidification and other climate change impacts that are seriously affecting coastal areas and low-lying coastal countries, including many least developed countries and small island developing States, and threatening the survival of many societies.<sup>670</sup>

(5) This preambular paragraph is linked to paragraph 1 of draft guideline 9 in the sense that the physical linkage that exists between the atmosphere and the oceans forms the physical basis of the interrelationship between the rules on the protection of the atmosphere and the rules of the law of the sea.<sup>671</sup>

#### *Preamble*

...

**Aware also, in particular, of the special situation of low-lying coastal areas and small island developing States due to sea-level rise,**

...

#### *Commentary*

(1) This preambular paragraph addresses one of the most profound impacts of atmospheric degradation, that is, the sea-level rise caused by global warming. It draws particular attention to the special situation of low-lying coastal areas and small island developing States due to sea-level rise. The Fifth Assessment Report of the Intergovernmental Panel on Climate Change estimates that the global mean sea-level rise is likely to be between 26 cm and 98 cm by the year 2100.<sup>672</sup> While exact figures and rates of change still remain uncertain, the report states that it is “virtually certain” that sea levels will continue to rise during the twenty-first century, and for centuries beyond—even if the concentrations of greenhouse gas emissions are stabilized. Moreover, sea-level rise is likely to exhibit “a strong regional pattern, with some places experiencing significant deviations of local and regional sea level change from the global mean change”.<sup>673</sup> That degree of change in sea levels may pose a potentially serious, maybe even disastrous, threat to many coastal areas, especially those with large, heavily populated and low-lying coastal areas, as well as to small island developing States.<sup>674</sup>

<sup>670</sup> General Assembly resolution 70/1 of 25 September 2015, Transforming our world: the 2030 Agenda for Sustainable Development, para. 14 (“Climate change is one of the greatest challenges of our time and its adverse impacts undermine the ability of all countries to achieve sustainable development. Increases in global temperature, sea level rise, ocean acidification and other climate change impacts are seriously affecting coastal areas and low-lying coastal countries, including many least developed countries and small island developing States. The survival of many societies, and of the biological support systems of the planet, is at risk”). See also “Oceans and the law of the sea: report of the Secretary-General” (A/71/74/Add.1), chap. VIII (“Oceans and climate change and ocean acidification”), paras. 115–122.

<sup>671</sup> See para. (6) of the commentary to draft guideline 9 below.

<sup>672</sup> IPCC, *Climate Change 2013: The Physical Science Basis—Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*, Cambridge, Cambridge University Press, 2013, p. 1180.

<sup>673</sup> *Ibid.*, p. 1140.

<sup>674</sup> See A. H. A. Soons, “The effects of a rising sea level on maritime limits and boundaries”, *Netherlands International Law Review*, vol. 37,

(2) This preambular paragraph is linked to the interrelationship between the rules of international law relating to the protection of the atmosphere and the rules of the law of the sea addressed in paragraph 1 of draft guideline 9.<sup>675</sup> This preambular paragraph is also linked to the special consideration to be given to persons and groups in vulnerable situations, which are referred to in paragraph 3 of draft guideline 9.<sup>676</sup> The words “in particular” are intended to acknowledge specific areas without necessarily limiting the list of potentially affected areas.

#### *Preamble*

...

**Noting that the interests of future generations of humankind in the long-term conservation of the quality of the atmosphere should be fully taken into account,**

...

#### *Commentary*

(1) This preambular paragraph emphasizes the interests of future generations, including with a view to human rights protection. The goal is to ensure that the planet remains habitable for future generations. In taking measures to protect the atmosphere today, it is important to take into account the long-term conservation of the quality of the atmosphere. The Paris Agreement of 2015 adopted under the United Nations Framework Convention on Climate Change, in its preamble, after acknowledging that climate change is a common concern of humankind, provides that parties should, when taking action to address climate change, respect, promote and consider, among other things, their respective obligations on human rights, as well as intergenerational equity. The importance of “intergenerational” considerations was already expressed in principle 1 of the 1972 Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration).<sup>677</sup> It also underpins the concept of sustainable development, as formulated in the 1987 Brundtland report, “Our Common Future”,<sup>678</sup> and informs the 2030 Agenda for Sustainable Development.<sup>679</sup> It is also reflected

No. 2 (1990), pp. 207–232; and M. Hayashi, “Sea-level rise and the law of the sea: future options”, in D. Vidas and P. J. Schei (eds.), *The World Ocean in Globalisation: Climate Change, Sustainable Fisheries, Biodiversity, Shipping, Regional Issues*, Leiden, Brill/Martinus Nijhoff, 2011, pp. 187–206. See also International Law Association, *Report of the Seventy-fifth Conference held in Sofia, August 2012* (London, 2012), pp. 385–428; and International Law Association, *Johannesburg Conference (2016): International Law and Sea Level Rise* (interim report), pp. 13–18.

<sup>675</sup> See para. (6) of the commentary to draft guideline 9 below.

<sup>676</sup> See para. (16) of the commentary to draft guideline 9 below.

<sup>677</sup> See *Report of the United Nations Conference on the Human Environment, Stockholm 5–16 June 1972* (United Nations publication, Sales No. E.73.II.A.14), chap. I. The Declaration was endorsed by the General Assembly in its resolution 2994 (XXVII) of 15 December 1972. Principle 1 of the Declaration referred to “solemn responsibility to protect and improve the environment for present and future generations”.

<sup>678</sup> Report of the World Commission on Environment and Development, *Our Common Future*, Oxford, Oxford University Press, 1987. It emphasized the importance of “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (p. 43). See also document A/42/427, p. 24.

<sup>679</sup> General Assembly resolution 70/1 of 25 September 2015, which emphasizes the need to protect the planet from degradation so that it can “support the needs of the present and future generations”.

in the preamble of the Convention on Biological Diversity of 1992,<sup>680</sup> and in other treaties.<sup>681</sup> Article 3, paragraph 1, of the United Nations Framework Convention on Climate Change of 1992 provides that “[p]arties should protect the climate system for the benefit of present and future generations of humankind”. The International Court of Justice has noted, in its 1996 advisory opinion in the *Legality of the Threat or Use of Nuclear Weapons* case with respect to such weapons, the imperative to take into account “in particular their ... ability to cause damage to generations to come”.<sup>682</sup>

(2) The Commission opted for the term “interests” rather than “benefit” under the present preambular paragraph. A similar formulation was used in draft guideline 6 provisionally adopted by the Commission at its sixty-eighth session, which referred to the interests of future generations in the context of “equitable and reasonable utilization of the atmosphere”.<sup>683</sup>

<sup>680</sup> The preamble of the Convention provides for the “benefit of present and future generations” in the conservation and sustainable use of biological diversity.

<sup>681</sup> Article 4 (vi) of the 1997 Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management provides that parties shall “strive to avoid actions that impose reasonably predictable impacts on future generations greater than those permitted for the current generation”.

<sup>682</sup> *Legality of the Threat or Use of Nuclear Weapons*, Advisory Opinion, *I.C.J. Reports* 1996, p. 226, at p. 244, para. 36.

<sup>683</sup> Though there are as yet no decisions by international tribunals concerning customary intergenerational rights, there have been many national court decisions, which may constitute practice for the purposes of customary international law, recognizing intergenerational equity; see C. Redgwell, “Principles and emerging norms in international law: intra- and inter-generational equity”, in C. P. Carlarne, K. R. Gray and R. G. Tarasofsky (eds.), *The Oxford Handbook of International Climate Change Law*, Oxford, Oxford University Press, 2016, pp. 185–201, at p. 198. See also Australia: *Gray v. Minister for Planning*, [2006] NSWLEC 720; India: *Vellore Citizens’ Welfare Forum and State of Tamil Nadu (joining) v. Union of India and others*, original public interest writ petition, 1996 5 SCR 241, ILDC 443 (IN 1996); Kenya: *Waweru, Mwangi (joining) and others (joining) v. Kenya*, miscellaneous civil application, Case No. 118 of 2004, application No. 118/04, ILDC 880 (KE 2006); South Africa: *Fuel Retailers Association of Southern Africa v. Director-General, Environmental Management, Department of Agriculture, Conservation and Environment, Mpumalanga Province, and others*, [2007] ZACC 13, 10 BCLR 1059; Pakistan: *Rabab Ali v. Federation of Pakistan*, petition filed 6 April 2016 (summary available from [www.ourchildrenstrust.org/pakistan](http://www.ourchildrenstrust.org/pakistan)). For commentary, see E. Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity*, Tokyo, United Nations University Press, 1989, p. 96; M. Bruce, “Institutional aspects of a charter of the rights of future generations”, in S. Busuttill and others (eds.), *Our Responsibilities Towards Future Generations*, Valletta, United Nations Educational, Scientific and Cultural Organization and Foundation for International Studies, University of Malta, 1990, pp. 127–131; T. Allen, “The Philippine children’s case: recognizing legal standing for future generations”, *Georgetown International Environmental Law Review*, vol. 6, No. 3 (1994), pp. 713–741 (referring to the judgment of the Philippine Supreme Court in *Minors Oposa et al. v. Factoran* (30 July 1993), ILM, vol. 33 (1994), p. 173). Standing to sue in some proceedings was granted on the basis of the “public trust doctrine”, which holds governments accountable as trustees for the management of common environmental resources. See M. C. Wood and C. W. Woodward IV, “Atmospheric trust litigation and the constitutional right to a healthy climate system: judicial recognition at last”, *Washington Journal of Environmental Law and Policy*, vol. 6 (2016), pp. 634–684; C. Redgwell, *Intergenerational Trusts and Environmental Protection*, Manchester, Manchester University Press, 1999; K. Coghill, C. Sampford and T. Smith (eds.), *Fiduciary Duty and the Atmospheric Trust*, London, Routledge, 2012; M. C. Blumm and M. C. Wood, *The Public Trust Doctrine in Environmental and Natural Resources Law*, 2nd ed., Durham, North Carolina, Carolina Academic Press, 2015; and

### Guideline 9. Interrelationship among relevant rules

**1. The rules of international law relating to the protection of the atmosphere and other relevant rules of international law, including inter alia the rules of international trade and investment law, of the law of the sea and of international human rights law, should, to the extent possible, be identified, interpreted and applied in order to give rise to a single set of compatible obligations, in line with the principles of harmonization and systemic integration, and with a view to avoiding conflicts. This should be done in accordance with the relevant rules set forth in the Vienna Convention on the Law of Treaties of 1969, including articles 30 and 31, paragraph 3 (c), and the principles and rules of customary international law.**

**2. States should, to the extent possible, when developing new rules of international law relating to the protection of the atmosphere and other relevant rules of international law, endeavour to do so in a harmonious manner.**

**3. When applying paragraphs 1 and 2, special consideration should be given to persons and groups particularly vulnerable to atmospheric pollution and atmospheric degradation. Such groups may include, inter alia, indigenous peoples, people of the least developed countries and people of low-lying coastal areas and small island developing States affected by sea-level rise.**

#### Commentary

(1) Draft guideline 9 addresses “interrelationship among relevant rules”<sup>684</sup> and seeks to reflect the relationship between rules of international law relating to the protection of the atmosphere and other relevant rules of international law. Paragraphs 1 and 2 are general in nature, while paragraph 3 places emphasis on the protection of groups that are particularly vulnerable to atmospheric pollution and atmospheric degradation. Atmospheric pollution and atmospheric degradation are defined in draft guideline 1 on the use of terms. Those terms focus on pollution and degradation caused “by humans”. That necessarily means that human activities governed by other fields of law have a bearing on the atmosphere and its protection. It is therefore important that conflicts and tensions between rules relating to the protection of the atmosphere and rules relating to other fields of international law be avoided to the extent possible. Accordingly, draft guideline 9 highlights the various techniques in international law for addressing tensions between

K. Bosselmann, *Earth Governance: Trusteeship of the Global Commons*, Cheltenham, Edward Elgar Publishing, 2015. In a judgment on 13 December 1996, the Indian Supreme Court declared the public trust doctrine “the law of the land” (*M. C. Mehta v. Kamal Nath and Others* (1997), 1 Supreme Court Cases 388, reprinted in *Compendium of Judicial Decisions in Matters Related to Environment: National Decisions*, vol. I, Nairobi, UNEP/UNDP, 1998, p. 259). See J. Razzaque, “Application of public trust doctrine in Indian environmental cases”, *Journal of Environmental Law*, vol. 13, No. 2 (2001), pp. 221–234.

<sup>684</sup> See draft article 10 (on interrelationship) of International Law Association resolution 2/2014 on the declaration of legal principles relating to climate change, *Report of the Seventy-sixth Conference held in Washington D.C., August 2014* (London, 2014), p. 26.

legal rules and principles, whether they relate to a matter of interpretation or a matter of conflict. The formulation of draft guideline 9 draws upon the conclusions reached by the Commission's Study Group on the fragmentation of international law: difficulties arising from the diversification and expansion of international law.<sup>685</sup>

(2) Paragraph 1 addresses three kinds of legal processes, namely the identification of the relevant rules, their interpretation and their application. The phrase “and with a view to avoiding conflicts” at the end of the first sentence of the paragraph signals that “avoiding conflicts” is one of the principal purposes of the paragraph. It is, however, not the exclusive purpose of the draft guideline. The paragraph is formulated in the passive form, in recognition of the fact that the process of identification, interpretation and application involves not only States but also international organizations, as appropriate.

(3) The phrase “should, to the extent possible, be identified, interpreted and applied in order to give rise to a single set of compatible obligations” draws upon the Commission's Study Group conclusions on the fragmentation of international law. The term “identified” is particularly relevant in relation to rules arising from treaty obligations and other sources of international law. In coordinating norms, certain preliminary steps need to be taken that pertain to identification, for example, a determination of whether two norms address “the same subject matter”, and which norm should be considered *lex generalis* or *lex specialis* and *lex anterior* or *lex posterior*, and whether the *pacta tertiis* rule applies. Moreover, when resorting to rules of customary international law for the purposes of interpretation, identification of customary international law itself is considered a prerequisite.

(4) The first sentence also makes specific reference to the principles of “harmonization and systemic integration”, which were accorded particular attention in the conclusions of the work of the Study Group. As noted in conclusion 4 on harmonization, when several norms bear on a single issue they should, to the extent possible, be interpreted so as to give rise to “a single set of compatible obligations”. Moreover, under conclusion 17, systemic integration denotes that “whatever their subject matter, treaties are a creation of the international legal system”. They should thus be interpreted against the background of other international rules and principles.

(5) The second sentence of paragraph 1 seeks to locate the paragraph within the relevant rules set forth in the Vienna Convention on the Law of Treaties of 1969, including articles 30 and 31, paragraph 3 (c), and the principles and rules of customary international law. Article 31, paragraph 3 (c), is intended to guarantee a “systemic interpretation”, requiring “any relevant rules of international law applicable in the relations between the parties” to be taken

into account.<sup>686</sup> In other words, article 31, paragraph 3 (c), of the 1969 Vienna Convention emphasizes both the “unity of international law” and “the sense in which rules should not be considered in isolation of general international law”.<sup>687</sup> Article 30 of the 1969 Vienna Convention provides rules to resolve a conflict, if the above principle of systemic integration does not work effectively in a given circumstance. Article 30 provides for conflict rules of *lex specialis* (para. 2), of *lex posterior* (para. 3) and of *pacta tertiis* (para. 4).<sup>688</sup> The phrase “principles and rules of customary international law” in the second sentence of paragraph 1 covers such principles and rules of customary international law as are relevant to the identification, interpretation and application of relevant rules.<sup>689</sup>

(6) The reference to “including *inter alia* the rules of international trade and investment law, of the law of the sea and of international human rights law” highlights the practical importance of these three areas in their relation to the protection of the atmosphere. The specified areas have close connections with the rules of international law relating to the protection of the atmosphere in terms of treaty practice, jurisprudence and doctrine.<sup>690</sup> Other fields of law, which might be equally relevant, have not been overlooked and the list of relevant fields of law is not intended to be exhaustive. Furthermore, nothing in draft guideline 9 should be interpreted as subordinating rules of international law in the listed fields to rules relating to the protection of the atmosphere and vice versa.

(7) With respect to international trade law, the concept of mutual supportiveness has emerged to help reconcile that law and international environmental law, which relates in part to protection of the atmosphere. The Marrakesh Agreement establishing the World Trade Organization (WTO) of 1994 provides, in its preamble, that its aim is to reconcile trade and development

<sup>686</sup> See, e.g., the World Trade Organization (WTO) Appellate Body report *United States—Import Prohibition of Certain Shrimp and Shrimp Products*, WT/DS58/AB/R, adopted on 6 November 1998, para. 158. See also *Al-Adsani v. the United Kingdom* [GC], Application No. 35763/97, ECHR 2001-XI, para. 55.

<sup>687</sup> P. Sands, “Treaty, custom and the cross-fertilization of international law”, *Yale Human Rights and Development Law Journal*, vol. 1 (1998), p. 95, para. 25; see also C. McLachlan, “The principle of systemic integration and article 31 (3) (c) of the Vienna Convention”, *International and Comparative Law Quarterly*, vol. 54 (2005), pp. 279–319; and J.-M. Sorel and V. Boré Eveno, “1969 Vienna Convention, Article 31: General rule of interpretation”, in O. Corten and P. Klein (eds.), *The Vienna Conventions on the Law of Treaties: A Commentary*, vol. 1, Oxford, Oxford University Press, 2011, pp. 804–837, at pp. 828–829.

<sup>688</sup> A. Orakhelashvili, “1969 Vienna Convention—Article 30: Application of successive treaties relating to the same subject matter”, in O. Corten and P. Klein (eds.) (footnote 687 above), pp. 764–800, at pp. 791–798.

<sup>689</sup> It may be noted that the WTO Understanding on Rules and Procedures Governing the Settlement of Disputes (Marrakesh Agreement establishing the World Trade Organization, annex 2) provides in article 3, paragraph 2, that “[t]he dispute settlement system of the WTO ... serves ... to clarify the existing provisions of those [covered] agreements in accordance with *customary*\* rules of interpretation of public international law”.

<sup>690</sup> See International Law Association, *Report of the Seventy-sixth Conference held in Washington ...* (footnote 684 above); and A. Boyle, “Relationship between international environmental law and other branches of international law”, in D. Bodansky, J. Brunnée and E. Hey (eds.), *The Oxford Handbook of International Environmental Law*, Oxford, Oxford University Press, 2007, pp. 125–146.

<sup>685</sup> *Yearbook ... 2006*, vol. II (Part Two), para. 251 (see conclusion 2 on “relationships of interpretation” and “relationships of conflict”). See also the analytical study in the report of the Study Group of the Commission finalized by Martti Koskenniemi on the fragmentation of international law: difficulties arising from the diversification and expansion of international law (A/CN.4/L.682 and Corr.1 and Add.1); the report is available from the Commission's website, documents of the fifty-eighth session, and the final text will be published as an addendum to *Yearbook ... 2006*, vol. II (Part One).

goals with environmental needs “in accordance with the objective of sustainable development”. The WTO Committee on Trade and Environment began pursuing its activities “with the aim of making international trade and environmental policies mutually supportive”,<sup>691</sup> and in its 1996 report to the Singapore Ministerial Conference, the Committee reiterated its position that the WTO system and environmental protection are “two areas of policy-making [that] are both important and ... should be mutually supportive in order to promote sustainable development”.<sup>692</sup> As the concept of “mutual supportiveness” has become gradually regarded as “a legal standard internal to the WTO”,<sup>693</sup> the 2001 Doha Ministerial Declaration expresses the conviction of States that “acting for the protection of the environment and the promotion of sustainable development can and must be mutually supportive”.<sup>694</sup> Mutual supportiveness is considered in international trade law as part of the principle of harmonization in interpreting conflicting rules of different treaties. Among a number of relevant WTO dispute settlement cases, the *United States—Standards for Reformulated and Conventional Gasoline* case in 1996 is most notable in that the Appellate Body refused to separate the rules of the General Agreement on Tariffs and Trade (GATT 1994) from other rules of interpretation in public international law, by stating that “the *General Agreement*\* is not to be read in clinical isolation from public international law”,<sup>695</sup> strongly supporting the interpretative principle of harmonization and systemic integration.

(8) Similar trends and approaches appear in international investment law. Free trade agreements, which contain a number of investment clauses, such as the North American Free Trade Agreement,<sup>696</sup> and numerous bilateral

investment treaties<sup>697</sup> also contain standards relating to the environment, which has been confirmed by the jurisprudence of the relevant dispute settlement bodies. Some investment tribunals have emphasized that investment treaties “cannot be read and interpreted in isolation from public international law”.<sup>698</sup>

(9) The same is the case with the law of the sea. The protection of the atmosphere is intrinsically linked to the oceans and the law of the sea owing to the close physical interaction between the atmosphere and the oceans. The Paris Agreement notes in its preamble “the importance of ensuring the integrity of all ecosystems, including oceans”. This link is also borne out by the United Nations Convention on the Law of the Sea of 1982,<sup>699</sup> which defines the “pollution of the marine environment”, in article 1, paragraph 1 (4), in such a way as to include all airborne sources of marine pollution, including atmospheric pollution from land-based sources and vessels.<sup>700</sup> It offers detailed provisions on the protection and preservation of the marine environment through Part XII, in particular articles 192, 194, 207, 211 and 212. There are a number of regional conventions regulating marine pollution from land-based sources.<sup>701</sup> IMO has sought to regulate vessel-source pollution in its efforts to supplement the provisions of the United Nations Convention on the Law of the Sea<sup>702</sup>

<sup>691</sup> Trade Negotiations Committee, decision on trade and environment of 14 April 1994.

<sup>692</sup> WTO, Committee on Trade and Environment, Report (1996), WT/CTE/1 (12 November 1996), para. 167.

<sup>693</sup> See J. Pauwelyn, *Conflict of Norms in Public International Law: How WTO Law Relates to Other Rules of International Law*, Cambridge, Cambridge University Press, 2003; R. Pavoni, “Mutual supportiveness as a principle of interpretation and law-making: a watershed for the ‘WTO-and-competing regimes’ debate?”, *European Journal of International Law*, vol. 21, No. 3 (2010), pp. 649–679, at pp. 651–652. See also S. Murase, “Perspectives from international economic law on transnational environmental issues”, *Collected Courses of the Hague Academy of International Law*, 1995, vol. 253, pp. 283–431, reproduced in S. Murase, *International Law: An Integrative Perspective on Transboundary Issues*, Tokyo, Sophia University Press, 2011, pp. 1–127; and S. Murase, “Conflict of international regimes: trade and the environment”, *ibid.*, pp. 130–166.

<sup>694</sup> Adopted in Doha on 14 November 2001 at the fourth session of the WTO Ministerial Conference, WT/MIN(01)/DEC/1, para. 6. The Hong Kong Ministerial Declaration of 2005 reaffirmed “the mandate in paragraph 31 of the Doha Ministerial Declaration aimed at enhancing the mutual supportiveness of trade and environment ...” (adopted in Hong Kong, China, on 18 December 2005 at the sixth session of the Ministerial Conference, WT/MIN(05)/DEC, para. 30).

<sup>695</sup> Report of the WTO Appellate Body, *United States—Standards for Reformulated and Conventional Gasoline*, WT/DS2/AB/R, adopted on 20 May 1996, p. 17. See also S. Murase, “Unilateral measures and the WTO dispute settlement” (discussing the *United States—Gasoline* case), in S. S. C. Tay and D. C. Esty (eds.), *Asian Dragons and Green Trade: Environment, Economics and International Law*, Singapore, Times Academic Press, 1996, pp. 137–144.

<sup>696</sup> North American Free Trade Agreement between the Government of Canada, the Government of the United Mexican States and the Government of the United States of America. Note, in particular, articles 104, paragraph 1, and 1114.

<sup>697</sup> There are various model bilateral investment treaties (BITs), such as: Canada Model BIT of 2004, available from [www.italaw.com/documents/Canadian2004-FIPA-model-en.pdf](http://www.italaw.com/documents/Canadian2004-FIPA-model-en.pdf); Colombia Model BIT of 2007, available from [www.italaw.com/documents/inv\\_model\\_bit\\_colombia.pdf](http://www.italaw.com/documents/inv_model_bit_colombia.pdf); United States Model BIT of 2012, available from [www.italaw.com/sites/default/files/archive/ita1028.pdf](http://www.italaw.com/sites/default/files/archive/ita1028.pdf); International Institute for Sustainable Development (IISD) Model International Agreement on Investment for Sustainable Development of 2005, H. Mann and others, *IISD Model International Agreement on Investment for Sustainable Development*, 2nd ed., Winnipeg, IISD, 2005, art. 34, available from [www.iisd.org/system/files/publications/investment\\_model\\_int\\_agreement.pdf](http://www.iisd.org/system/files/publications/investment_model_int_agreement.pdf). See also United Nations Conference on Trade and Development, *Investment Policy Framework for Sustainable Development* (2015), pp. 91–121, available from [http://unctad.org/en/PublicationsLibrary/diaepcb2015d5\\_en.pdf](http://unctad.org/en/PublicationsLibrary/diaepcb2015d5_en.pdf); and P. Muchlinski, “Negotiating new generation international investment agreements: new sustainable development-oriented initiatives”, in S. Hindelang and M. Krajewski (eds.), *Shifting Paradigms in International Investment Law: More Balanced, Less Isolated, Increasingly Diversified*, Oxford, Oxford University Press, 2016, pp. 41–64.

<sup>698</sup> *Phoenix Action, Ltd. v. the Czech Republic*, International Centre for Settlement of Investment Disputes (ICSID) Case No. ARB/06/5, Award, 15 April 2009, para. 78.

<sup>699</sup> Prior to the Convention, the only international instrument of significance was the 1963 Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space and Under Water.

<sup>700</sup> See M. H. Nordquist and others (eds.), *United Nations Convention on the Law of the Sea 1982: A Commentary*, vol. II, Dordrecht, Martinus Nijhoff, 1991, pp. 41–42.

<sup>701</sup> For example, the Convention for the Protection of the Marine Environment of the North-East Atlantic, art. 1 (e); the Convention on the Protection of the Marine Environment of the Baltic Sea Area, art. 2, para. 2; the Protocol for the Protection of the Mediterranean Sea against Pollution from Land-based Sources, art. 4, para. 1 (b); the Protocol for the Protection of the South-East Pacific against Pollution from Land-based Sources, art. II (c); and the Protocol for the Protection of the Marine Environment against Pollution from Land-based Sources to the Kuwait Regional Convention for Cooperation on the Protection of the Marine Environment from Pollution, art. III.

<sup>702</sup> For example, at the fifty-eighth session of the Marine Environment Protection Committee, in 2008, IMO adopted annex VI, as amended, to the International Convention for the Prevention of Pollution from Ships, which regulates, *inter alia*, emissions of SO<sub>x</sub> and NO<sub>x</sub>. The Convention now has six annexes, namely, annex I on regulations

and to combat climate change.<sup>703</sup> The effective implementation of the applicable rules of the law of the sea could help to protect the atmosphere. Similarly, the effective implementation of the rules on the protection of the environment could protect the oceans.

(10) As for international human rights law, environmental degradation, including air pollution, climate change and ozone layer depletion, “has the potential to affect the realization of human rights”.<sup>704</sup> The link between human rights and the environment, including the atmosphere, is acknowledged in practice. The Stockholm Declaration recognizes, in its principle 1, that everyone “has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being”.<sup>705</sup> The Rio Declaration on Environment and Development of 1992 outlines, in its principle 1, that “[h]uman beings are at the centre of concerns for sustainable development”, and that “[t]hey are entitled to a healthy and productive life in harmony with nature”.<sup>706</sup> In the context of atmospheric pollution, the 1979 Convention on Long-range Transboundary Air Pollution recognizes that air pollution has “deleterious effects of such a nature as to endanger human health” and provides that the parties are determined “to protect man and his environment against air pollution” of a certain magnitude.<sup>707</sup> Likewise, for atmospheric degradation, the 1985 Vienna Convention for the Protection of the Ozone Layer contains a provision

whereby the parties are required to take appropriate measures “to protect human health” in accordance with the Convention and Protocols to which they are a party.<sup>708</sup> Similarly, the 1992 United Nations Framework Convention on Climate Change deals with the adverse effects of climate change, including significant deleterious effects “on human health and welfare”.<sup>709</sup>

(11) In this regard, relevant human rights are “the right to life”,<sup>710</sup> “the right to private and family life”<sup>711</sup> and “the right to property”.<sup>712</sup> Where a specific right to environment exists in human rights conventions, the relevant courts and treaty bodies apply it, including the right to health. In order for international human rights law to contribute to the protection of the atmosphere, however, certain core requirements must be fulfilled.<sup>713</sup> First, as international human rights law remains “a personal-injury-based legal system”,<sup>714</sup> a direct link between atmospheric pollution or degradation that impairs the protected right and an impairment of a protected right must be established. Second, the adverse effects of atmospheric pollution or degradation must attain a certain threshold if they are to fall within the scope of international human rights law. The assessment of such minimum standards is relative and depends on the content of the right to be invoked and all the relevant circumstances of the case, such as the intensity and duration of the nuisance and its physical or mental effects. Third, and most importantly, it is necessary to establish the causal link between an action or omission of a State, on the one hand, and atmospheric pollution or degradation, on the other hand.

(12) One of the difficulties in the interrelationship between the rules of international law relating to the atmosphere and human rights law is the “disconnect” in their application. While the rules of international law relating to the atmosphere apply not only to the States of victims but also to the States of origin of the harm, the scope of application of human rights treaties is limited to the persons subject to a State’s jurisdiction.<sup>715</sup> Thus, where

(Footnote 702 continued)

for the prevention of pollution by oil (entry into force on 2 October 1983); annex II on regulations for the control of pollution by noxious liquid substances in bulk (entry into force on 6 April 1987); annex III on regulations for the prevention of pollution by harmful substances carried by sea in packaged form (entry into force on 1 July 1992); annex IV on regulations for the prevention of pollution by sewage from ships (entry into force on 27 September 2003); annex V on regulations for the prevention of pollution by garbage from ships (entry into force on 31 December 1988); and annex VI on regulations for the prevention of air pollution from ships (entry into force on 19 May 2005).

<sup>703</sup> See S. Karim, *Prevention of Pollution of the Marine Environment from Vessels: The Potential and Limits of the International Maritime Organization*, Dordrecht, Springer, 2015, pp. 107–126; S. Karim and S. Alam, “Climate change and reduction of emissions of greenhouse gases from ships: an appraisal”, *Asian Journal of International Law*, vol. 1, No. 1 (2011), pp. 131–148; Y. Shi, “Are greenhouse gas emissions from international shipping a type of marine pollution?”, *Marine Pollution Bulletin*, vol. 113, Nos. 1–2 (2016), pp. 187–192; J. Harrison, “Recent developments and continuing challenges in the regulation of greenhouse gas emissions from international shipping” (2012), Edinburgh School of Law Research Paper No. 2012/12, p. 20. Available from <https://ssrn.com/abstract=2037038>.

<sup>704</sup> Analytical study on the relationship between human rights and the environment: report of the United Nations High Commissioner for Human Rights (A/HRC/19/34), para. 15. See also Human Rights Council resolution 19/10 of 22 March 2012 on human rights and the environment, *Official Records of the General Assembly, Sixty-seventh Session, Supplement No. 53 (A/67/53)*, pp. 34–37.

<sup>705</sup> *Report of the United Nations Conference on the Human Environment* (see footnote 677 above), p. 4; see also L. B. Sohn, “The Stockholm Declaration on the Human Environment”, *Harvard International Law Journal*, vol. 14 (1973), pp. 423–515, at pp. 451–455.

<sup>706</sup> *Report of the United Nations Conference on Environment and Development, Rio de Janeiro, 3–14 June 1992*, vol. I: *Resolutions Adopted by the Conference* (United Nations publication, Sales No. E.93.I.8 and corrigendum), resolution 1, annex I, p. 3; see also F. Francioni, “Principle 1: human beings and the environment”, in J. E. Viñuales (ed.), *The Rio Declaration on Environment and Development: A Commentary*, Oxford, Oxford University Press, 2015, pp. 93–106, at pp. 97–98.

<sup>707</sup> Convention on Long-range Transboundary Air Pollution, arts. 1 and 2.

<sup>708</sup> Vienna Convention for the Protection of the Ozone Layer, art. 2.

<sup>709</sup> United Nations Framework Convention on Climate Change, art. 1, para. 1.

<sup>710</sup> Article 6 of the International Covenant on Civil and Political Rights of 1966; article 6 of the Convention on the Rights of the Child of 1989; article 10 of the Convention on the Rights of Persons with Disabilities of 2006; article 2 of the Convention for the Protection of Human Rights and Fundamental Freedoms of 1950 (European Convention on Human Rights); article 4 of the American Convention on Human Rights of 1969; and article 4 of the African Charter on Human and Peoples’ Rights of 1981.

<sup>711</sup> Article 17 of the International Covenant on Civil and Political Rights; article 8 of the European Convention on Human Rights; and article 11, paragraph 2, of the American Convention on Human Rights.

<sup>712</sup> Article 1 of the Protocol to the European Convention on Human Rights (Protocol No. 1); article 21 of the American Convention on Human Rights; and article 14 of the African Charter on Human and Peoples’ Rights. See D. Shelton, “Human rights and the environment: substantive rights”, in M. Fitzmaurice, D. M. Ong and P. Merkouris (eds.), *Research Handbook on International Environmental Law*, Cheltenham, Edward Elgar, 2010, pp. 265–283, at pp. 267 and 269–278.

<sup>713</sup> See P.-M. Dupuy and J. E. Viñuales, *International Environmental Law*, Cambridge, Cambridge University Press, 2015, pp. 320–329.

<sup>714</sup> *Ibid.*, pp. 308–309.

<sup>715</sup> Article 2 of the International Covenant on Civil and Political Rights; article 1 of the European Convention on Human Rights; and article 1 of the American Convention on Human Rights. See A. Boyle, “Human rights and the environment: where next?”, *European Journal of International Law*, vol. 23, No. 3 (2012), pp. 613–642, at pp. 633–641.



an environmentally harmful activity in one State affects persons in another State, the question of the interpretation of “jurisdiction” in the context of human rights obligations arises. In interpreting and applying the notion, regard may be had to the object and purpose of human rights treaties. In its advisory opinion on the *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory*, the International Court of Justice pronounced, when addressing the issue of extraterritorial jurisdiction, “while the jurisdiction of States is primarily territorial, it may sometimes be exercised outside the national territory. Considering the object and purpose of the International Covenant on Civil and Political Rights, it would seem natural that, even when such is the case, States parties to the Covenant should be bound to comply with its provisions”.<sup>716</sup>

(13) One possible consideration is the relevance of the principle of non-discrimination. Some authors maintain that it may be considered unreasonable that international human rights law would have no application to atmospheric pollution or global degradation and that the law can extend protection only to the victims of intra-boundary pollution. They maintain that the non-discrimination principle requires the responsible State to treat transboundary atmospheric pollution or global atmospheric degradation no differently from domestic pollution.<sup>717</sup> Furthermore, if and insofar as the relevant human rights norms are today recognized as either established or emergent rules of customary international law,<sup>718</sup> they may be considered as overlapping with environmental norms for the protection of the atmosphere, such as due diligence (draft guideline 3), environmental impact assessment (draft guideline 4), sustainable utilization (draft guideline 5), equitable and reasonable utilization (draft guideline 6) and international cooperation (draft guideline 8), among others, which would enable interpretation and application of both norms in a harmonious manner.

(14) In contrast to paragraph 1, which addresses identification, interpretation and application, paragraph 2 deals with the situation in which States wish to develop new rules. It provides that “States should, to the extent possible, when developing new rules of international law relating to the protection of the atmosphere and other relevant rules of international law, endeavour to do so in a harmonious manner”. The paragraph signals a general desire to encourage States, when engaged in negotiations involving the creation of new rules, to take into account the systemic relationships that exist between rules of

international law relating to the atmosphere and rules in other legal fields.

(15) Paragraph 3 highlights the plight of those in vulnerable situations because of atmospheric pollution and atmospheric degradation. It has been formulated to make a direct reference to atmospheric pollution and atmospheric degradation. The reference to paragraphs 1 and 2 captures both the aspects of “identification, interpretation and application”, on the one hand, and “development”, on the other hand. The phrase “special consideration should be given to persons and groups particularly vulnerable to atmospheric pollution and atmospheric degradation” underlines the broad scope of the consideration to be given to the situation of vulnerable groups, covering both aspects of the present topic, namely “atmospheric pollution” and “atmospheric degradation”. It was not considered useful to refer in the text to “human rights”, or even to “rights” or “legally protected interests”.

(16) The second sentence of paragraph 3 gives examples of groups that may be found in vulnerable situations in the context of atmospheric pollution and atmospheric degradation. The World Health Organization (WHO) has noted that “[a]ll populations will be affected by a changing climate, but the initial health risks vary greatly, depending on where and how people live. People living in small island developing States and other coastal regions, megacities, and mountainous and polar regions are all particularly vulnerable in different ways.”<sup>719</sup> In the Sustainable Development Goals adopted by the General Assembly in its 2030 Agenda for Sustainable Development, atmospheric pollution is addressed in Goals 3.9 and 11.6, which call, in particular, for a substantial reduction in the number of deaths and illnesses from air pollution, and for special attention to ambient air quality in cities.<sup>720</sup>

(17) The phrase in the second sentence of paragraph 3 “may include, *inter alia*” denotes that the examples given are not necessarily exhaustive. Indigenous peoples are, as was declared in the report of the Indigenous Peoples’ Global Summit on Climate Change, “the most vulnerable to the impacts of climate change because they live in the areas most affected by climate change and are usually the most socio-economically disadvantaged”.<sup>721</sup> People

<sup>716</sup> *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004*, p. 136, at p. 179, para. 109.

<sup>717</sup> See Boyle, “Human rights and the environment ...” (footnote 715 above), pp. 639–640.

<sup>718</sup> See B. Simma and P. Alston, “The sources of human rights law: custom, *jus cogens*, and general principles”, *Australian Year Book of International Law*, vol. 12 (1989), pp. 82–108; V. Dimitrijevic, “Customary law as an instrument for the protection of human rights”, Working Paper No. 7, Milan, Istituto per gli Studi di Politica Internazionale (ISPI), 2006, pp. 3–30; B. Simma, “Human rights in the International Court of Justice: are we witnessing a sea change?”, in D. Alland and others (eds.), *Unity and Diversity of International Law: Essays in Honour of Professor Pierre-Marie Dupuy*, Leiden, Martinus Nijhoff, 2014, pp. 711–737; and H. Thirlway, “Human rights in customary law: an attempt to define some of the issues”, *Leiden Journal of International Law*, vol. 28 (2015), pp. 495–506.

<sup>719</sup> WHO, *Protecting Health from Climate Change: Connecting Science, Policy and People*, Geneva, 2009, p. 2.

<sup>720</sup> General Assembly resolution 70/1 of 25 September 2015 on transforming our world: the 2030 Agenda for Sustainable Development; see B. Lode, P. Schönberger and P. Toussaint, “Clean air for all by 2030? Air quality in the 2030 Agenda and in international law”, *Review of European, Comparative and International Environmental Law*, vol. 25, No. 1 (2016), pp. 27–38. See also the indicators for these targets specified in 2016 (3.9.1: mortality rate attributed to household and ambient air pollution; and 11.6.2: annual mean levels of fine particulate matter in cities).

<sup>721</sup> Report of the Indigenous Peoples’ Global Summit on Climate Change, 20–24 April 2009, Anchorage, Alaska, p. 11; available from [www.researchgate.net/publication/267868094\\_Report\\_of\\_the\\_Indigenous\\_Peoples'\\_Global\\_Summit\\_on\\_Climate\\_Change](http://www.researchgate.net/publication/267868094_Report_of_the_Indigenous_Peoples'_Global_Summit_on_Climate_Change). See R. L. Barsh, “Indigenous peoples”, in Bodansky, Brunnée and Hey (eds.) (footnote 690 above), pp. 829–852; B. Kingsbury, “Indigenous peoples”, in R. Wolfrum (ed.), *The Max Planck Encyclopedia of Public International Law*, vol. V, Oxford, Oxford University Press, 2012, pp. 116–133; and H. A. Strydom, “Environment and indigenous peoples”, *ibid.*, vol. III, Oxford, Oxford University Press, 2012, pp. 455–461 (online edition: <http://opil.ouplaw.com/home/MPIL>).

of the least developed countries are also placed in a particularly vulnerable situation as they often live in extreme poverty, without access to basic infrastructure services and to adequate medical and social protection.<sup>722</sup> People of low-lying areas and small island developing States affected by sea-level rise are subject to the potential loss of land, leading to displacement and, in some cases, forced migration. This phrase is inspired by the preamble of the Paris Agreement and, in addition to the groups specifically indicated in paragraph 3 of draft guideline 9, other groups of potentially particularly vulnerable people include local communities, migrants, women, children, persons with disabilities and also the elderly, who are often

<sup>722</sup> World Bank Group Climate Change Action Plan, 7 April 2016, para. 104; available from <http://pubdocs.worldbank.org/en/677331460056382875/WBG-Climate-Change-Action-Plan-public-version.pdf>.

seriously affected by atmospheric pollution and atmospheric degradation.<sup>723</sup>

<sup>723</sup> The Committee on the Elimination of Discrimination against Women has an agenda on “gender-related dimensions of disaster risk reduction and climate change”; see [www.ohchr.org/en/hrbodies/cedaw/pages/climatechange.aspx](http://www.ohchr.org/en/hrbodies/cedaw/pages/climatechange.aspx). Along with women and children, the elderly and persons with disabilities are usually mentioned as vulnerable people. See WHO, *Protecting Health from Climate Change ...* (footnote 719 above) and the World Bank Group Climate Change Action Plan (footnote 722 above). The Inter-American Convention on Protecting the Human Rights of Older Persons of 2015 provides, in article 25 (Right to a healthy environment), that “[o]lder persons have the right to live in a healthy environment with access to basic public services. To that end, States Parties shall adopt appropriate measures to safeguard and promote the exercise of this right, *inter alia*: (a) To foster the development of older persons to their full potential in harmony with nature; (b) To ensure access for older persons, on an equal basis with others, to basic public drinking water and sanitation services, among others.”