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Second report on protection of the environment in relation to armed conflicts by Marja Lehto, Special Rapporteur*

Contents

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I. Introduction

A. Previous work on the topic

1. At its sixty-fifth session (2013), the Commission decided to include the topic "Protection of the environment in relation to armed conflicts" in its programme of work, and appointed Ms. Marie G. Jacobsson as Special Rapporteur for the topic.[1] The Commission received and considered three reports between its sixty-sixth session (2014) and its sixty-eighth session (2016).[2] At its sixty-eighth session, the Commission provisionally adopted draft principles 1, 2, 5 and 9 to 13, and commentaries thereto,[3] and took note of draft principles 4, 6 to 8, and 14 to 18, which had been provisionally adopted by the Drafting Committee.[4] At its sixty-ninth session (2017), the Commission established a Working Group to consider the way forward in relation to the topic as Ms. Jacobsson was no longer with the Commission, and decided to appoint Ms. Marja Lehto as the new Special Rapporteur.[5] At its seventieth session (2018), the Commission provisionally adopted draft principles 4, 6 to 8, and 14 to 18 as well as commentaries thereto. Also at the seventieth session, the Commission considered the first report of the present Special Rapporteur (A/CN.4/720 and Corr.1) and took note of draft principles 19, 20 and 21 provisionally adopted by the Drafting Committee at the same session (A/CN.4/L.911).

B. Debate in the Sixth Committee of the General Assembly

2. The topic was commented upon in the Sixth Committee's debate in 2018 by 35 States, two of them speaking on behalf of a group of States, as well as by the International Committee of the Red Cross.[6] The speakers in general welcomed the continuation of the Commission's work on the topic, underlining its importance, or

[1] *Official Records of the General Assembly, Sixty-eighth Session, Supplement No. 10* (A/68/10), para. 131.

[2] A/CN.4/674 and Corr.1, A/CN.4/685 and A/CN.4/700.

[3] *Official Records of the General Assembly, Sixty-ninth Session, Supplement No. 10* (A/69/10), para. 188.

[4] *Ibid.*, para. 146.

[5] *Ibid., Seventy-second Session, Supplement No. 10* (A/72/10), para. 262.

[6] Algeria (A/C.6/73/SR.30, paras. 82–86); Austria (A/C.6/73/SR.28, paras. 58–61); Azerbaijan (A/C.6/73/SR.29, paras. 114–123); Bahamas (on behalf of the Caribbean Community (CARICOM)) (A/C.6/73/SR.20, para. 36); Belarus (A/C.6/73/SR.29, paras. 72–79); Brazil (A/C.6/73/SR.28, paras. 67–71); China (A/C.6/73/SR.25, para. 18); Colombia (A/C.6/73/SR.29, paras. 142–144); Czech Republic (A/C.6/73/SR.28, paras. 98–99); France (A/C.6/73/SR.30, paras. 58–59); Greece (A/C.6/73/SR.27, paras. 10–12); Iran (Islamic Republic of) (A/C.6/73/SR.30, paras. 52–54); Israel (*ibid.*, paras. 14–16); Japan (A/C.6/73/SR.28, para. 84); Lebanon (A/C.6/73/SR.29, paras. 96–98); Malaysia (A/C.6/73/SR.30, paras. 67–74); Mexico (A/C.6/73/SR.29, paras. 4–6); Micronesia (Federated States of) (*ibid.*, paras. 145–147); Netherlands (*ibid.*, paras. 44–47); New Zealand (A/C.6/73/SR.26, paras. 101–103); Peru (A/C.6/73/SR.28, para. 80); Poland (*ibid.*, para. 73); Portugal (*ibid.*, paras. 88–91); Republic of Korea (A/C.6/73/SR.30, paras. 29–31); Romania (A/C.6/73/SR.29, paras. 107–108); Russian Federation (*ibid.*, paras. 125–130); Slovakia (A/C.6/73/SR.28, para. 107); South Africa (A/C.6/73/SR.30, paras. 2–5); Sweden (on behalf of the Nordic countries) (A/C.6/73/SR.28, paras. 50–53); Switzerland (A/C.6/73/SR.29, paras. 99–102); Turkey (A/C.6/73/SR.30, para. 51); Ukraine (A/C.6/73/SR.23, paras. 38–42); United Kingdom of Great Britain and Northern Ireland (A/C.6/73/SR.30, para. 9); United States of America (A/C.6/73/SR.29, paras. 41–42); Viet Nam (A/C.6/73/SR.30, paras. 43–44); International Committee of the Red Cross (ICRC) (A/C.6/73/SR.24, para. 76).

commended the progress achieved during the seventieth session.[7] The focus on situations of occupation was also commended.[8]

3. Several States commented on the issue of complementarity, or the interplay of different areas of international law. While it was agreed that international humanitarian law was *lex specialis* during an armed conflict, speakers also saw a need to address human rights and environmental obligations within the scope of the topic.[9] It was pointed out that international humanitarian law does not "operate to the exclusion of all other rules and principles of law during armed conflict",[10] and that determining the applicable law in situations of occupation required a careful analysis of the realities on the ground and was "not simply a matter of applying the principle of *lex specialis*".[11] The Commission was urged to highlight the complementarities between the law of occupation and other areas of international law.[12] Some States nevertheless recommended caution in this regard.[13] It was pointed out that "[t]he extent to which rules contained in other bodies of law might apply during armed conflict must be considered on a case-by-case basis".[14] Many speakers stressed the importance of ensuring that the Commission's work on the topic remained in line with the existing rules of international humanitarian law.[15]

[7] Algeria (A/C.6/73/SR.30, para. 82); Austria (A/C.6/73/SR.28, para. 58); Colombia (A/C.6/73/SR.29, paras. 142–144); Greece (A/C.6/73/SR.27, para. 10); Japan (A/C.6/73/SR.28, para. 84); Lebanon (see statement of 31 October 2018 (all statements made in the Sixth Committee available from United Nations PaperSmart portal, http://papersmart.unmeetings.org); also A/C.6/73/SR.29, para. 96); Mexico (see statement of 31 October 2018; also A/C.6/73/SR.29, para. 4); Peru (A/C.6/73/SR.28, para. 80); Portugal (*ibid.*, para. 88); South Africa (A/C.6/73/SR.30, para. 2); Sweden (on behalf of the Nordic countries) (A/C.6/73/SR.28, para. 50); Ukraine (A/C.6/73/SR.23, para. 38); United States (A/C.6/73/SR.29, para. 41); Viet Nam (A/C.6/73/SR.30, para. 43). Some States nevertheless maintained their reservations to the continuation of the topic, see Czech Republic (A/C.6/73/SR.28, para. 98) and the Russian Federation (A/C.6/73/SR.29, para. 125).

[8] See, e.g., Algeria (A/C.6/73/SR.30, para. 82); Lebanon (see statement of 31 October 2018; also A/C.6/73/SR.29, para. 96); New Zealand (A/C.6/73/SR.26, para. 101); Republic of Korea (A/C.6/73/SR.30, para. 29); South Africa (A/C.6/73/SR.30, para. 2); Ukraine (A/C.6/73/SR.23, para. 38).

[9] See, e.g., Algeria (A/C.6/73/SR.30, para. 82); Austria (A/C.6/73/SR.28, para. 58); Azerbaijan (A/C.6/73/SR.29, para. 114); Brazil (A/C.6/73/SR.28, para. 67); Colombia (A/C.6/73/SR.29, para. 143); Iran (Islamic Republic of) (A/C.6/73/SR.30, para. 54); Japan (A/C.6/73/SR.28, para. 84); Malaysia (A/C.6/73/SR.30, para. 72); Micronesia (Federated States of) (A/C.6/73/SR.29, para. 147); New Zealand (A/C.6/73/SR.26, para. 101); Portugal (A/C.6/73/SR.28, paras. 88 and 89); Romania (A/C.6/73/SR.29, para. 107); South Africa (A/C.6/73/SR.30, para. 2); Ukraine (A/C.6/73/SR.23, para. 40); Viet Nam (A/C.6/73/SR.30, para. 44).

[10] Brazil (see statement of 30 October 2018; also A/C.6/73/SR.28, para. 67). Similarly Romania (A/C.6/73/SR.29, para. 107) and South Africa A/C.6/73/SR.30, para. 3).

[11] Brazil (A/C.6/73/SR.28, para. 67).

[12] See, e.g., Colombia (see statement of 31 October 2018; also A/C.6/73/SR.29, para. 143); New Zealand (A/C.6/73/SR.26, para. 101); Portugal (A/C.6/73/SR.28, para. 88); Romania (A/C.6/73/SR.29, para. 107); South Africa (A/C.6/73/SR.30, para. 2); Ukraine (A/C.6/73/SR.23 para. 40).

[13] France (A/C.6/73/SR.30, para. 58); Israel (*ibid.*, para. 14); United Kingdom (*ibid.*, para. 9); United States (A/C.6/73/SR.29, para. 41).

[14] United States (A/C.6/73/SR.29, para. 41).

[15] See Azerbaijan (A/C.6/73/SR.29, para. 114); Brazil (A/C.6/73/SR.28, para. 67); Republic of Korea (A/C.6/73/SR.30, para. 29); Russian Federation (A/C.6/73/SR.29, para. 127); United Kingdom (A/C.6/73/SR.30, para. 9); ICRC (A/C.6/73/SR.24, para. 76).

4. Most of those who spoke welcomed the Commission's intention to address, as part of its future work on the topic, the issues of responsibility and liability[16] and certain problems relating to the protection of the environment in non-international armed conflicts.[17] The Commission was asked to bear in mind "the increasing convergence of norms applicable to international and non-international armed conflicts" and to recognize that both types of conflict could have an equally severe impact on the environment.[18] The view was also expressed that the draft principles should be restricted to international armed conflicts,[19] and a number of States wished for more clarity in this regard.[20] Some delegations expressed skepticism as to the outcome of the Commission's consideration of the topic.[21]

5. Some comments were made about the use of terms, including the issue of whether to qualify the notion of the environment that was still pending. The view was expressed that the term "natural environment" might be unnecessarily restrictive in some instances.[22] Similarly, it was pointed out that "environmental issues were not limited to the natural environment; they included human rights, sustainability and cultural heritage".[23] The view was also expressed that the use of mandatory terms should be reserved for well-settled rules that constituted *lex lata*.[24] The importance of using terminology in a consistent manner was also emphasized.[25]

6. A number of specific comments were made concerning draft principles 19 to 21, which had been provisionally adopted by the Drafting Committee. Several States supported the content of draft principle 19, which articulates the general obligations of an Occupying Power to respect and protect the environment of the occupied territory.[26] Some States expressed the view that specific reference should be made to the link between the protection of human rights and the protection of the environment,

[16] Algeria (A/C.6/73/SR.30, para. 85); Azerbaijan (A/C.6/73/SR.29, para. 120); Bahamas (on behalf of CARICOM) (A/C.6/73/SR.20, para. 36); Belarus (A/C.6/73/SR.29, para. 79); Lebanon (*ibid.*, para. 98); New Zealand (A/C.6/73/SR.26, para. 101); Portugal (A/C.6/73/SR.28, para. 91); Romania (A/C.6/73/SR.29, para. 108); South Africa (A/C.6/73/SR.30, para. 5); Ukraine (A/C.6/73/SR.23, para. 42); Viet Nam (A/C.6/73/SR.30, para. 43).

[17] Bahamas (on behalf of CARICOM), (A/C.6/73/SR.20, para. 36); Mexico (A/C.6/73/SR.29, para. 6); Netherlands (*ibid.*, para. 47); New Zealand (A/C.6/73/SR.26, para. 103); Portugal (A/C.6/73/SR.28, para. 91); Republic of Korea (A/C.6/73/SR.30, para. 31); Romania (A/C.6/73/SR.29, para. 108); Slovakia (A/C.6/73/SR.28, para. 107); South Africa (A/C.6/73/SR.30, para. 5); Sweden (on behalf of the Nordic countries), (A/C.6/73/SR.28, para. 53); Switzerland (A/C.6/73/SR.29, para. 102).

[18] South Africa (A/C.6/73/SR.30, para. 5); similarly Mexico (A/C.6/73/SR.29, para. 6).

[19] Belarus (A/C.6/73/SR.29, para. 73); Iran (Islamic Republic of) (A/C.6/73/SR.30, para. 52); Turkey (see statement of 31 October 2018; also A/C.6/73/SR.30).

[20] Bahamas (on behalf of CARICOM) (A/C.6/73/SR.20, para. 36); Brazil (A/C.6/73/SR.28, para. 69); China (A/C.6/73/SR.25, para. 18).

[21] Czech Republic (A/C.6/73/SR.28, para. 98); Israel (A/C.6/73/SR.30, para. 15); Russian Federation (A/C.6/73/SR.29, para. 125); Turkey (see statement of 31 October 2018; also A/C.6/73/SR.30, para. 51).

[22] Switzerland (A/C.6/73/SR.29, para. 102).

[23] Malaysia (A/C.6/73/SR.30, para. 67).

[24] United States (A/C.6/73/SR.29, para. 42).

[25] Japan (A/C.6/73/SR.28, para. 84); Malaysia (A/C.6/73/SR.30, para. 67); Sweden (on behalf of the Nordic countries) (A/C.6/73/SR.28, para. 52).

[26] Algeria (A/C.6/73/SR.30, para. 83); Austria (A/C.6/73/SR.28, para. 59); Greece (A/C.6/73/SR.27, para. 10); Micronesia (Federated States of) (A/C.6/73/SR.29, para. 147); Netherlands (*ibid.*, para. 45); Poland (A/C.6/73/SR.28, para. 73); South Africa (A/C.6/73/SR.30, para. 4).

either in draft principle 19 or in a separate draft principle.[27] Clarification was sought as to the meaning of "environmental considerations".[28]

7. Proposals were made regarding the drafting of paragraph 2 of that principle.[29] The deletion of a reference to maritime areas was regretted by some[30] but supported by others.[31] Regarding the obligation of an Occupying Power to respect the legislation of the occupied territory, articulated in paragraph 3, some States wished to add a qualifier to cover situations in which not doing so would be more conducive to the well-being of the population.[32]

8. A number of speakers commented on draft principle 20 concerning the use of natural resources, many of whom supported the requirement of sustainable use of natural resources.[33] At the same time, it was recalled that the question whether and to what extent the natural resources of an occupied territory might be used by the Occupying Power was complex, [34] and conditioned by the temporary nature of occupation.[35] Several States underlined the importance of the principles of permanent sovereignty over natural resources and of self-determination, which provided the general framework for the administration and use by the Occupying Power of the natural resources of the occupied territory.[36] The role of the prohibition of pillage under article 47 of the Hague Regulations and article 33 of the Geneva Convention IV[37] was highlighted in that regard.[38] The view was also expressed that draft principle 20 should be better aligned with article 55 of the Hague Regulations.[39] It was furthermore pointed out that the notion of "population of the occupied territory" which appeared in draft principles 19 and 20 should be aligned with article 4 of the Geneva Convention IV.[40]

9. Draft principle 21 received support from several speakers.[41] It was furthermore pointed out that the due diligence obligation of an Occupying Power also extended to

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[27] Malaysia (A/C.6/73/SR.30, para. 72); Micronesia (Federated States of) (A/C.6/73/SR.29, para. 147); Switzerland (*ibid.*, para. 102).

[28] Austria (A/C.6/73/SR.28, para. 59); Belarus (A/C.6/73/SR.29, para. 76); Russian Federation (*ibid.*, para. 129).

[29] Israel (A/C.6/73/SR.30, para. 16); Lebanon (A/C.6/73/SR.29, para. 96); South Africa (A/C.6/73/SR.30, para. 4).

[30] Algeria (A/C.6/73/SR.30, para. 84); South Africa (*ibid.*, para. 4); Sweden (on behalf of the Nordic countries) (A/C.6/73/SR.28, para. 51).

[31] Greece (A/C.6/73/SR.27, para. 10).

[32] Belarus (A/C.6/73/SR.29, para. 76); Malaysia (see statement of 31 October 2018; also A/C.6/73/SR.30, para. 67).

[33] Algeria (A/C.6/73/SR.30, para. 85); Belarus (A/C.6/73/SR.29, para. 79); Greece (A/C.6/73/SR.27, para. 11); Malaysia (A/C.6/73/SR.30, para. 73); Netherlands (A/C.6/73/SR.29, para. 46); Sweden (on behalf of the Nordic countries) (A/C.6/73/SR.28, para. 52).

[34] Greece (A/C.6/73/SR.27, para. 11).

[35] Azerbaijan (A/C.6/73/SR.29, para. 118); Belarus (*ibid.*, para. 79).

[36] Algeria (A/C.6/73/SR.30, para. 85); Azerbaijan (A/C.6/73/SR.29, para. 116); Brazil (A/C.6/73/SR.28, para. 68); Greece (A/C.6/73/SR.27, para. 12); Malaysia (A/C.6/73/SR.30, para. 73).

[37] Convention (IV) respecting the laws and customs of war on land (Hague Convention IV), Annex to the Convention: Regulations concerning the Laws and Customs of War on Land (the Hague Regulations) (The Hague, 18 October 1907), J.B. Scott (ed.), *The Hague Conventions and Declarations of 1899 and 1907*, 3rd ed. (New York, Oxford University Press, 1915), p. 100, and Geneva Convention relative to the Protection of Civilian Persons in Time of War (Geneva, 12 August 1949), United Nations, *Treaty Series*, vol. 75, No. 973, p. 287 (Geneva Convention IV).

[38] Azerbaijan (A/C.6/73/SR.29, paras. 118-119); Greece (A/C.6/73/SR.27, para. 11).

[39] Israel (A/C.6/73/SR.30, para. 16).

[40] Lebanon (A/C.6/73/SR.29, para. 96).

[41] Algeria (A/C.6/73/SR.30, para. 83); Austria (A/C.6/73/SR.28, para. 61); Malaysia (A/C.6/73/SR.30, para. 74); New Zealand (A/C.6/73/SR.26, para. 102); Poland (A/C.6/73/SR.28, para. 73); Ukraine (A/C.6/73/SR.23, para. 41).

acts performed within its own territory that may cause environmental harm in the occupied territory in case the two territories are adjacent.[42] It was suggested that the draft of the principle should be brought in line with principle 21 of the Stockholm Declaration[43] and principle 2 of the Rio Declaration,[44] which were already well established in international law. A view was expressed that, as currently worded, the draft principle reduced the obligation of an Occupying Power to due diligence.[45] It was furthermore suggested that the language of principle 21 should be aligned with draft principle 19 and the Commission's earlier work.[46]

10. Comments were also made regarding the draft principles that had been provisionally adopted by the Commission at its seventieth session. Some delegations found the reference to "further measures" in paragraph 2 of draft principle 4 to be unclear,[47] although another delegation considered the less prescriptive formulation in paragraph 2, aimed at encouraging voluntary measures, to be suitable for the topic.[48] A question was raised about the applicability of draft principle 6 to local communities with long-standing historical, cultural or political roots in a country.[49] Proposals were made to clarify the scope of draft principle 8 with regard to the link to armed conflicts.[50] The view was expressed that draft principle 10 should be supported by international practice with regard to damage to the environment and its interrelationship with the concept of military advantage.[51]

C. Purpose and structure of the report

11. The new areas addressed in the present report are among those identified by the Working Group for the topic in 2017 as being able to usefully complement the Commission's work. Chapter II of the present report considers certain questions of the protection of the environment in non-international armed conflicts, with a focus on how the international rules and practices concerning natural resources may enhance the protection of the environment during and after such conflicts. It should be underlined here that the two questions considered in chapter II – illegal exploitation of natural resources and unintended environmental effects of human displacement – are not exclusive to non-international armed conflicts. Nor do they provide a basis for a comprehensive consideration of environmental issues relating to non-international conflicts. At the same time, they are representative of problems that have been prevalent in current non-international armed conflicts and have caused severe stress to the environment.

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[42] Algeria (A/C.6/73/SR.30, para. 86).

[43] Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration), *Report of the United Nations Conference on the Human Environment* (A/CONF.48/14/Rev.1; United Nations publication, Sales No. E.73. II.A.14), chap. I, at p. 5, principle 21: "States have, in accordance with the Charter of the United Nations and the principles of international law … the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction."

[44] Rio Declaration on Environment and Development (Rio Declaration), *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, principle 2.

[45] Austria (A/C.6/73/SR.28, para. 61).

[46] Japan (*ibid*., para. 84).

[47] Belarus (A/C.6/73/SR.29, para. 74); Russian Federation (*ibid.,* para. 129).

[48] Republic of Korea (A/C.6/73/SR.30, para. 30).

[49] Micronesia (Federated States of) (A/C.6/73/SR.29, para. 146).

[50] Brazil (A/C.6/73/SR.28, para. 71); Republic of Korea (A/C.6/73/SR.30, para. 30).

[51] Mexico (A/C.6/73/SR.29, para. 6).

12. Research based on the post-conflict environmental assessments conducted since the 1990s by the United Nations Environment Programme, the United Nations Development Programme and the World Bank has identified the use of extractive industries to fuel conflict, and human displacement as being among the six principal pathways for direct environmental damage in conflict.[52] The pertinence of both issues from the point of view of the environment has also been recognized by the United Nations Environmental Assembly.[53] The other major causes of environmental harm highlighted in that research include toxic hazards from the bombardment of industrial sites and urban infrastructure, weapons, landmines, unexploded ordnance and depleted uranium, and direct targeting of natural resources, particularly scorched earth tactics.[54] Those three causes of environmental harm have to a certain extent been addressed in the existing draft principles related to conduct of hostilities and remnants of war.[55] Addressing the former two issues in chapter II underscores the complementary nature of the present report.

13. Chapters III and IV, in line with the priorities endorsed by the Commission and the Sixth Committee, deal with certain questions related to responsibility and liability. Chapter III discusses the responsibility and liability for environmental damage and depletion of natural resources in conflict caused by non-State actors. Such responsibility may be of a civil or a criminal nature. While in section A, dealing with non-State armed groups, the main focus is on individual criminal responsibility, section B, on multinational enterprises, as well as private military companies as a specific category of private companies present in conflict zones, looks at a number of accountability mechanisms, including civil liability suits.

14. Chapter IV addresses certain questions of State responsibility and liability. The general rules of State responsibility for wartime damage are discussed in section A, with a particular focus on challenges arising from the presence or involvement of multiple States and other actors in current conflicts. Section B addresses certain questions specific to the valuation and reparation of environmental damage, while section C adds a few examples related to remediation without the establishment of responsibility.

15. Chapter V is dedicated to the consolidation of the set of draft principles by gap-filling. The first of the three questions addressed in section A is the proposal made during the Commission's seventieth session to include in the set of draft principles a principle modelled on the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques.[56] The subject of section B is

[52] D. Jensen and S. Lonergan, "Natural resources and post-conflict assessment, remediation, restoration and reconstruction: lessons and emerging issues", in Jensen and Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding* (Abingdon, Earthscan from Routledge, 2012), pp. 411–450, p. 414.

[53] See United Nations Environmental Assembly resolution 2/15 of 27 May 2016 on "Protection of the environment in areas affected by armed conflict" (UNEP/EA.2/Res.15), eleventh preambular paragraph and operative para. 1, and resolution 3/1 of 6 December 2017 on "Pollution mitigation and control in areas affected by armed conflict or terrorism" (UNEP/EA.3/Res.1), eleventh and fifteenth preambular paragraphs.

[54] The sixth principal pathway mentioned in the study is the loss of water supply, sanitation and waste disposal infrastructure, Jensen and Lonergan, "Natural resources and post-conflict assessment, remediation, restoration and reconstruction: lessons and emerging issues" (footnote 52 above), p. 414.

[55] See draft principles 9 [II-1], 10 [II-2], 11 [II-3], 12 [II-4] and 13 [II-5], *Official Records of the General Assembly, Seventy-first Session, Supplement No. 10* (A/71/10), chap. X, and draft principles 16 and 17, *ibid., Seventy-third Session, Supplement No. 10* (A/73/10), chap. IX.

[56] Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (New York, 10 December 1976), United Nations, *Treaty Series*, vol. 1108, No. 17119, p. 151.

the Martens clause, which has been referred to several times in the context of the present topic.[57] Finally, the different approaches to the definition of the environment are discussed in section C, and a proposal is made to harmonize the references to the environment in the draft principles.

16. As a matter of convenience, the 18 draft principles provisionally adopted by the Commission to date as well as the three draft principles provisionally adopted by the Drafting Committee have been annexed to the present report.

II. Protection of natural resources in relation to armed conflict

17. Illegal exploitation of natural resources in armed conflict is not a new phenomenon, and not one exclusively related to non-international armed conflicts.[58] During the past two decades, however, the problem has attracted heightened international attention mainly in its guise as a form of financing for non-State armed groups. The protracted conflicts in, *inter alia*, Angola, Côte d'Ivoire, the Democratic Republic of the Congo, Liberia and Sierra Leone have thrived on the illegal exploitation of natural wealth.[59] According to the United Nations Environment Programme, 40 per cent of internal armed conflicts over the past 60 years were related to natural resources and, since 1990, at least 18 armed conflicts have been fuelled directly by natural resources.[60] The role of natural resources in perpetuating conflicts has been the dominant perspective from which the problem of accelerated and unsustainable exploitation of resources in conflict situations has been viewed, as well as the primary motivation behind the Security Council's many resolutions aiming at curtailing the exploitation of and trade in "conflict resources".[61] Similarly, the goal of breaking the link between conflict financing and natural resources has been advanced by the United Nations Environment Programme, the United Nations

[57] Preliminary report of the Special Rapporteur, Ms. Marie G. Jacobsson, A/CN.4/674 and Corr.1, paras. 99, 101 and 103; second report of Ms. Jacobsson, A/CN.4/685, para. 146.

[58] *Trial of Dr. Joseph Buhler*, Case No. 85, *Law Reports of Trials of War Criminals*, vol. XIV (London, His Majesty's Stationery Office, 1949), p. 23; *U.S.A. v. von Weizsaecker et al. ("The Ministries case")*, Case No. 11, Schwerin von Krosigk, *Trials of War Criminals before the Nürnberg Military Tribunals*, vol. XIV (Nuremburg, 1949), p. 784; *The Ministries case*, Pleiger, *ibid.*, p. 736, at p. 741; *The Ministries case*, Koerner, *ibid.*, p. 727, at p. 734.

[59] See, e.g., I. Bannon and P. Collier (eds.), *Natural Resources and Violent Conflict. Options and Actions* (Washington, D.C., The World Bank, 2003); A. Alao, *Natural Resources and Conflict in Africa. The Tragedy of Endowment*, Rochester studies in African history and the Diaspora (Rochester, New York, University of Rochester, 2007); J. Tsabora, "Fighting the resource wars in the Democratic Republic of the Congo: An exploratory diagnosis of the legal and institutional problems", *Comparative and International Law Journal of Southern Africa*, vol. 47 (2014), pp. 109–128, at pp. 110–116; D. Jensen *et al.*, "Addressing the role of natural resources in conflict and peacebuilding. A summary of progress from UNEP's Environmental Cooperation for Peacebuilding Programme 2008–2015" (United Nations Environment Programme, 2015); A. E. Varisco, "A study on the inter-relation between armed conflict and natural resources and its implications for conflict resolution and peacebuilding", *Journal of Peace, Conflict and Development*, No. 15 (2010).

[60] *Renewable Resources and Conflict: Toolkit and Guidance for Preventing and Managing Land and Natural Resources Conflicts* (New York, United Nations Interagency Framework Team for Preventive Action, 2012), p. 14. Available at www.un.org/en/land-natural-resources-conflict/renewable-resources.shtml (last accessed on 8 January 2019).

[61] See, e.g., Security Council resolution 1306 (2000) on the situation in Sierra Leone; Security Council resolutions 1457 (2003) and 1856 (2008) on the situation in the Democratic Republic of the Congo. As pointed out in the third report of Ms. Jacobsson, A/CN.4/700, para. 162, footnote 282, the Security Council had adopted by 31 December 2014 a total of 242 resolutions addressing natural resources.

Development Programme, and other United Nations bodies and agencies engaged in enhancing the governance of natural resources in post-conflict situations.[62]

18. While much of this policy agenda and activity, in particular where the focus is on natural resources as an economic asset,[63] falls beyond the scope of the present topic, it is worth pointing out that the illegal exploitation of natural resources can seriously impair the environment, pollute air, water and soil, and displace communities.[64] Expert panels appointed by the Security Council have reported on an ecological destruction engendered by conflict; for instance, "highly organized and systematic exploitation activities at levels never before seen" in national parks of the Democratic Republic of the Congo, including "poaching for ivory, game meat and rare species, logging, and mining for coltan, gold and diamonds".[65] The overexploitation of the forests of Liberia has been said to threaten "the long-term viability of the forest and the forest industry, as well as the lives, livelihoods and culture of Liberians who depend on the forest".[66] Deforestation, moreover, reduces biodiversity, contributes to the loss of ecosystem functions, including extreme weather mitigation, and accelerates climate change by weakening the forest carbon sink.[67]

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[62] See progress report of the Secretary-General on peacebuilding in the immediate aftermath of conflict (A/63/881–S/2009/304); United Nations Development Group, "Natural resources management in transitional settings", UNDG-ECHA guidance note (January 2013); C. Bruch, C. Muffett, and S. S. Nichols (eds.), *Governance, Natural Resources, and Post-Conflict Peacebuilding* (Abingdon, Earthscan from Routledge, 2016); Jensen and Lonergan, "Natural resources and post-conflict assessment, remediation, restoration and reconstruction: lessons and emerging issues" (footnote 52 above).

[63] The approaches to natural resource exploitation can be divided into those that view natural resources purely as a resource with economic value and those that highlight the environmental consequences of resource exploitation as well as the intrinsic value of nature and its resources. See, e.g., M. Bowman, "Biodiversity, intrinsic value, and the definition and valuation of environmental harm", in Bowman and A. Boyle (eds.), *Environmental Damage in International and Comparative Law: Problems of Definition and Valuation* (Oxford, Oxford University Press, 2002), pp. 41–61. For combinations of the two main approaches by including, e.g., environmental protection, sustainability and conservation viewpoints into natural resources exploitation, such as resource economics, environmental economics or ecosystem services approach, see, e.g., D. Helm, *Natural Capital: Valuing the Planet* (New Haven and London, Yale University Press, 2015), pp. 1–16; D. Glover, *Valuing the Environment: Economics for a Sustainable Future* (Ottawa, International Development Research Centre, 2010), pp. 1–3; J. C. Bergstrom and A. Randall, *Resource Economics: An Economic Approach to Natural Resource and Environmental Policy*, 4th ed. (Cheltenham, Edward Elgar, 2016), pp. 3–73; T. Sterner, *Policy Instruments for Environmental and Natural Resource Management* (Resources for the Future, The World Bank, Swedish International Development Cooperation Agency, 2003), pp 1–6; R. Costanza *et al*., "The value of the world's ecosystem services and natural capital", *Nature*, vol. 387 (1997), pp. 253–260. See also R. B. Bilder, "International law and natural resources policies", *Natural Resources Journal*, vol. 20 (1980), pp. 451–486.

[64] C. Nellemann *et al.* (eds.), *The Rise of Environmental Crime – A Growing Threat to Natural Resources, Peace, Development and Security* (United Nations Environment Programme/INTERPOL, 2016), p. 69.

[65] Interim report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo (S/2002/565), para. 52. See also United Nations Environment Programme, *The Democratic Republic of the Congo: Post-Conflict Environmental Assessment. Synthesis Report for Policy Makers* (Nairobi, United Nations Environment Programme, 2011), pp. 26–28. Available at http://wedocs.unep.org/handle/20.500.11822/22069.

[66] Report of the Panel of Experts pursuant to paragraph 25 of Security Council resolution 1478 (2003) concerning Liberia (S/2003/779), para. 14. See also United Nations Environment Programme, *Desk Study on the Environment in Liberia* (Geneva, 2004), pp. 16–18 and 42–51. Available at http://wedocs.unep.org/handle/20.500.11822/8396.

[67] Nellemann *et al.*, *The Rise of Environmental Crime* **…** (footnote 64 above), p. 7. See also International Law Association, "Second report of the Committee on the Role of International

19. The severe environmental impacts of illegal resource extraction[68] and the link between conflict and deforestation[69] have been well evidenced. It should also be pointed out that such impacts may be long lasting. Not all resources are renewable, reforestation can take decades and may not produce expected results, restoring areas affected by erosion or desertification is difficult, forms of land use may change permanently, and species may be lost. In addition, resources may not be available to clean up the polluted or destroyed habitat. The structures of environmental administration, management and governance must be rebuilt. All this impacts the ability of a society emerging from conflict to manage its natural resources sustainably.[70]

20. The need to address the connection between the legal protection of natural resources and the environment has been recognized in the earlier work of the Commission on the topic. It has furthermore been pointed out that such a connection relates to all three temporal phases of the work: preventive measures, conduct of hostilities and reparative measures. [71] This is evident, as far as phase one is concerned, in the designation of protected zones in areas of major ecological importance, including for the protection of the traditional lifestyles of indigenous peoples in accordance with the Convention on Biological Diversity,[72] the presence of military forces,[73] and peace operations,[74] to mention a few examples. In phase two, the draft principles concerning the prohibition of deliberate targeting of or collateral damage to the environment may contribute to the protection of natural resources.[75] In phase three, protection of natural resources is related, *inter alia*, to peace agreements, which

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Law in Sustainable Natural Resource Management for Development, 2016–2018", report submitted to the Seventy-Eighth Conference held in Sydney from 19–24 August 2018: "Forests contain most of the world's terrestrial biodiversity, and perform a host of environmental functions including soil formation, nutrient cycling, air quality control, carbon storage, water quality and availability, and protect against desertification, salinization, landslides, flooding and drought."

[68] Illegal mining of gold, for example, may lead to widespread environmental damage and depletion of natural resources. "[G]old mining is one of the most destructive industries … [when conducted illegally, it may lead to] displacing communities, contaminating drinking water and polluting water and land with mercury and cyanide". See Nellemann *et al.*, *The Rise of Environmental Crime …* (footnote 64 above), p. 69. See also Minamata Convention on Mercury (Kumamoto, 10 October 2013), text available from https://treaties.un.org (Status of Multilateral Treaties Deposited with the Secretary-General, chap. XXVII.17).

[69] K. Conca and J. Wallace, "Environment and peacebuilding in war-torn societies: lessons from the UN Environment Programme's experience with post-conflict assessment.", in Jensen and Lonergan (eds.), *Assessing and Restoring Natural Resources in Post-Conflict Peacebuilding* (footnote 52 above), pp. 63–84, at p. 70.

[70] See, e.g., United Nations Environment Programme, *Afghanistan: Post-Conflict Environmental Assessment* (Geneva, 2003), pp. 10–13, available at http://wedocs.unep.org/handle/20.500.11822/7656; United Nations Environment Programme, *Desk Study on the Environment in Liberia* (footnote 66 above), pp. 8–10 and 68. For further discussion, see, e.g., E. Frauhiger, "An environmental no man's land: the often overlooked consequences of armed conflict on the natural environment", *William and Mary Environmental Law and Policy Review*, vol. 42 (2018), pp. 1025–1050.

[71] Second report of Ms. Jacobsson, A/CN.4/685, para. 15. See also *ibid.*, paras. 79–87.

[72] See draft principle 5 [I(x)] and para. (9) of the commentary thereto, *Official Records of the General Assembly, Seventy-first Session, Supplement No. 10* (A/71/10), para. 189, at pp. 323 ff. Convention on Biological Diversity (Rio de Janeiro, 5 June 1992), United Nations, *Treaty Series* vol. 1760, No. 30619, p. 79.

[73] See draft principle 7 and para. (6) of the commentary thereto, *Official Records of the General Assembly, Seventy-third Session, Supplement No. 10* (A/73/10), para. 218, at pp. 256–258.

[74] See draft principle 8 and para. (7) of the commentary thereto, *ibid.*, para. 218, at pp. 258 and 260.

[75] See draft principles 10 [II-2], 11 [II-3], 12 [11-4] and 13 [11-5], *ibid., Seventy-first Session, Supplement No. 10* (A/71/10), para. 189, at pp. 332–340.

may, and are encouraged to, include provisions "on enforcing national laws and regulations on natural resources",[76] as well as to post-conflict environmental assessments and remediation.[77] In the following sections of the present report, wartime environmental harm related to natural resources is discussed from two additional viewpoints.

A. Illegal exploitation of natural resources

21. "Illegal exploitation of natural resources", as used in the relevant Security Council resolutions,[78] is a general notion that may cover the activities of States, non-State armed groups, or other non-State actors, including private individuals. Accordingly, it may refer to illegality under international or national law. The rules of international law protecting natural resources in conflict are few and derive from several areas of law, including the law of armed conflict and international environmental law. More generally, legal regimes applicable to natural resources tend to be sector-specific and fail to cover certain critical areas.[79] Such regimes have been complemented in recent decades by the action of the Security Council, as well as specific regulatory frameworks addressing private actors.

22. As far as the law of armed conflict is concerned, the prohibition of pillage is an established rule of customary law recognized since the earliest codifications.[80] The Geneva Convention IV contains an absolute prohibition of pillage, both in the territory of a party to an armed conflict, and in an occupied territory.[81] Additional Protocol II to the Geneva Conventions confirms the applicability of this general prohibition in non-international armed conflicts meeting the criteria set out in the Protocol and, literally, "at any time and in any place whatsoever".[82] The prohibition has been widely incorporated into national legislation as well as in military manuals.[83] There is also considerable case law from both the Second World War and modern international criminal tribunals confirming the criminal nature of pillage.[84]

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[76] See draft principle 14 and para. (7) of the commentary thereto, *ibid., Seventy-third Session, Supplement No. 10* (A/73/10), para. 218, pp. 260–262.

[77] See draft principle 15 and para. (6) of the commentary thereto, referring to environmental recovery programmes aiming at strengthening the national and local environmental authorities, rehabilitating ecosystems, mitigating risks and ensuring sustainable utilization of resources. *Ibid.*, at pp. 263–264.

[78] See, e.g., Security Council resolution 1457 (2003), para. 2, in which the Council "[s]trongly condemns the illegal exploitation of the natural resources of the Democratic Republic of the Congo".

[79] See International Law Association, "Second report of the Committee on the Role of International Law in Sustainable Natural Resource Management for Development" (footnote 67 above), p. 12, mentioning the "lack of multilateral agreements dealing specifically with sustainable management of mineral commodities" and that "no single treaty on forests has been adopted, nor does any individual treaty address all aspects of forest ecosystems", p. 15.

[80] Hague Convention IV, arts. 28 and 47. The prohibition of pillage also appeared in the Instructions for the Government of Armies of the United States in the Field (art. 44), originally adopted as General Orders No. 100: The Lieber Code (24 April 1863) (Washington, D.C., Government Printing Office, 1898), as well as in the Project of an International Declaration concerning the Laws and Customs of War (Brussels Declaration) (Brussels, 27 August 1874), art. 18.

[81] Geneva Convention IV, art. 33, para. 2.

[82] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Geneva, 8 June 1977), United Nations, *Treaty Series*, vol. 1125, No. 17513, p. 609, (Additional Protocol II), art. 4, para. 2 (*g*).

[83] J.M. Henckaerts and L. Doswald-Beck, *Customary International Humanitarian Law: Rules*, vol. I (Cambridge, Cambridge University Press, 2005), rule 52, "Pillage is prohibited", pp. 182–185.

[84] See paras. 61 and 62 below.

23. According to the commentary of the International Committee of the Red Cross (ICRC) on Geneva Convention IV, the prohibition covers both organized pillage and isolated acts of indiscipline, and applies to all categories of property, whether public or private.[85] That wording is general and allows a reading that includes natural resources, whether owned by the State, communities or private persons.[86] This interpretation was acknowledged by the International Court of Justice in its *Armed Activities* judgment, in which it found that Uganda was internationally responsible "for acts of looting, plundering and exploitation of the [Democratic Republic of the Congo]'s natural resources" committed by members of the Ugandan Armed Forces in the territory of the Democratic Republic of the Congo.[87]

24. The principle of permanent sovereignty over natural resources provides general protection to a State's natural resources, in particular against foreign illegal appropriation, and it was raised in this sense in the *Armed Activities* proceedings.[88] The Democratic Republic of the Congo claimed that Uganda, by engaging in the illegal exploitation of Congolese natural resources, had violated "respect for the sovereignty of States, including over their natural resources". Furthermore, reference was made in this context to the principle of equality of peoples and the right of self-determination, as well as "the duty … to refrain from exposing peoples to foreign subjugation, domination or exploitation; [and] the principle of non-interference in matters within the domestic jurisdiction of States, including economic matters".[89] The Court, however, remained unconvinced that there was a governmental policy on the part of Uganda directed at the exploitation of natural resources. At the same time, the Court was satisfied with the evidence that proved the involvement of "officers and soldiers of the [Uganda People's Defence Forces], including the most high-ranking officers, … in the looting, plundering and exploitation of the [Democratic Republic of the Congo]'s natural resources and that the military authorities did not take any measures to put an end to these acts".[90]

25. The principle of permanent sovereignty over natural resources also has a strong emphasis on peoples' rights as is clear from the way in which it has been phrased in the African Charter on Human and Peoples' Rights: "All peoples shall freely dispose of their wealth and natural resources. This right shall be exercised in the exclusive interest of the people. In no case shall a people be deprived of it".[91] This wording follows closely the way the principle has been stated in the two International Covenants on Human Rights[92] and has a close connection to the requirement in

[85] ICRC commentary (1958) on Geneva Convention IV, art. 33, para. 2 (the commentaries on the Geneva Conventions of 1949 and the Protocols thereto are available from www.icrc.org/en/war-and-law/treaties-customary-law/geneva-conventions (last accessed on 2 February 2019)).

[86] Property rules have also been widely used at the national level "for settling disputes concerning access, use and control of resources" and constitute therefore "a critical mechanism for environmental protection". T. Hardman Reis, *Compensation for Environmental Damage under International Law. The Role of the International Judge* (Alphen aan den Rijn, Wolters Kluwer, 2011), p. 13.

[87] *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda, Judgment, I.C.J. Reports 2005*, p. 168, at p. 253, para. 250.

[88] See General Assembly resolutions 1803 (XVII) of 14 December 1962, 3201 (S.VI) of 1 May 1974 (Declaration on the Establishment of a New International Economic Order) and 3281 (XXIX) of 12 December 1974 (Charter of Economic Rights and Duties of States), and Security Council resolution 1291 (2000) (situation in the Democratic Republic of the Congo), preamble, para. 4.

[89] *Armed Activities* (footnote 87 above), para. 222.

[90] *Ibid*., para. 242. For a discussion of the scope of application of the principle, see the first report of the present Special Rapporteur (A/CN.4/720 and Corr.1), paras. 33–34.

[91] African Charter on Human and Peoples' Rights (Nairobi, 27 June 1981), United Nations, *Treaty Series*, vol. 1520, No. 26363, p. 217, art. 21, para. 1.

[92] International Covenant on Civil and Political Rights (New York, 16 December 1966), United Nations, *Treaty Series*, vol. 999, No. 14668, p. 171, art. 1, para. 2, and International Covenant on

article 2, paragraph 1, of the International Covenant on Economic, Social and Cultural Rights concerning each State's obligation of progressive realization of the rights under the Covenant "to the maximum of its available resources". The principle has also been associated with the fair and equitable sharing of the benefits arising from the exploitation of natural resources within a State. [93]

26. The African Charter also prohibits pillage: "In case of spoliation the dispossessed people shall have the right to the lawful recovery of its property as well as to an adequate compensation". [94] The Lusaka Protocol of the International Conference on the Great Lakes Region reproduces the same provisions and contains a separate article requiring States parties to establish the liability of legal entities for participating in the illegal exploitation of natural resources. [95] The motivation for the adoption of that Protocol was the need to break the link between illegal exploitation of natural resources and armed conflict, [96] but it also draws attention to the negative environmental effects of illegal exploitation of those resources. [97]

27. International environmental law provides special protection to certain categories of natural resources that are relevant to the present topic. This is the case, for instance, for international watercourses and lakes, [98] and wildlife (i.e., the prevention of international trade therein). [99] Wetlands of international importance that have been designated as such in accordance with the Ramsar Convention also enjoy special protection. [100] The critical role of forests in the preservation of biodiversity and mitigation of the effects of climate change has been recognized in the Paris Agreement [101] and the World Heritage Convention. [102] The International Tropical

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Economic, Social and Cultural Rights (New York, 16 December 1966), *ibid.*, vol. 993, No. 14531, p. 3, art. 1, para. 2.

[93] F. Francioni, "Natural resources and human rights", in E. Morgera and K. Kulovesi (eds.), *Research Handbook on International Law and Natural Resources* (Cheltenham, Edward Elgar, 2016), pp. 66–85, at p. 71. See also Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (Nagoya, 29 October 2010), text available from https://treaties.un.org (Status of Multilateral Treaties Deposited with the Secretary-General, chap. XXVII, No. 30619).

[94] African Charter on Human and Peoples' Rights, art. 21, para. 2.

[95] Protocol against the Illegal Exploitation of Natural Resources of the International Conference on the Great Lakes Region (Nairobi, 30 November 2006), art. 17, para. 1, available at https://ungreatlakes.unmissions.org/sites/default/files/icglr_protocol_against_the_illegal_exploitation_of_natural_resourcess.pdf. See also para. 3: "Without prejudice to the criminal liability of natural persons having committed similar offences".

[96] *Ibid*., sixth preambular paragraph.

[97] *Ibid.*, seventh preambular paragraph: "Deeply concerned about the negative impact of the illegal exploitation of natural resources, which aggravates environmental degradation and deprives States of the resources needed to fight poverty."

[98] Convention on the Law of the Non-navigational Uses of International Watercourses (New York, 21 May 1997), text available from https://treaties.un.org (Status of Multilateral Treaties Deposited with the Secretary-General, chap. XXVII); Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Helsinki, 17 March 1992), United Nations, *Treaty Series,* vol. 1936, No. 33207, p. 269.

[99] Convention on International Trade in Endangered Species of Wild Fauna and Flora (Washington, 3 March 1973), United Nations, *Treaty Series,* vol. 993, No. 14537, p. 243.

[100] Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar, 2 February 1971), *ibid.*, vol. 996, No. 14583, p. 245 (hereinafter, "Ramsar Convention").

[101] Paris Agreement adopted under the United Nations Framework Convention on Climate Change (Paris, 12 December 2015), FCCC/CP/2015/10/Add.1, decision 1/CP.21, annex, art. 5, para. 1.Forests have particular importance for the achievement of the long-term goal of the Paris Agreement of net zero greenhouse gas emissions in the second half of the century. The Agreement also obliges Parties to take steps to conserve and enhance greenhouse gas sinks and reservoirs, see art. 4, para. 1.

[102] Convention concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention) (Paris, 16 November 1972), United Nations, *Treaty Series*, vol. 1037, No. 15511,

Timber Agreement[103] promotes international trade in tropical timber from sustainably managed and legally harvested forests, as well as the sustainable management of forests producing tropical timber.[104] Finally, the United Nations Convention to Combat Desertification[105] promotes sustainable land management and the mitigation of the "effects of drought in countries experiencing serious drought and/or desertification, particularly in Africa".[106]

28. The Convention on Biological Diversity obliges its Parties to conserve the components of biological diversity within the limits of their national jurisdiction, but also in relation to "processes and activities, regardless of where their effects occur, carried out under its jurisdiction or control, within the area of its national jurisdiction or beyond the limits of national jurisdiction".[107] All the above-mentioned conventions protect the interests of a larger community of States: the negative implications of armed conflict on biodiversity, for instance, have been described as "complex, multiscaled, and not limited to conflict zones or the time period of active hostilities".[108] The special protection provided by these treaty regimes can be presumed to continue to apply in armed conflict, at least to the extent that their provisions do not conflict with the law of armed conflict,[109] but the countries' capacity to effectively enforce the conventions is often significantly weakened because of the conflict.[110] In post-conflict situations, however, multilateral environmental agreements provide a legal framework for supporting and assisting States emerging from conflict to meet their environmental obligations.[111]

29. Furthermore, the United Nations Convention against Corruption[112] and the United Nations Convention on Transnational Organized Crime[113] have been recognized as relevant in the context of the illegal exploitation of natural resources in armed conflicts. The presence of criminal networks has been a well-documented

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p. 151. The World Heritage Convention requires the Parties to identify and protect the natural and cultural heritage sites of special value or significance on their territory. The World Heritage Forest Programme was established in 2001. More information available at https://whc.unesco.org/en/forests/ (last accessed on 23 January 2019).

[103] International Tropical Timber Agreement (Geneva, 18 November 1983), United Nations, *Treaty Series*, vol. 1393, No. 23317, p. 67.

[104] *Ibid*., art. 1.

[105] United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, particularly in Africa (Paris, 14 October 1994), United Nations, *Treaty Series,* vol. 1954, No. 33480, p. 3.

[106] *Ibid*., arts. 2 and 3.

[107] Convention on Biological Diversity, arts. 1 and 4.

[108] T. Hanson *et al.*, "Warfare in biodiversity hotspots", *Conservation Biology*, vol. 23 (2009), pp. 578–587.

[109] See first report of the present Special rapporteur (A/CN.4/720 and Corr.1), paras. 77–80.

[110] Regarding the Convention on International Trade in Endangered Species of Wild Fauna and Flora, see, e.g., R. Harvey, "Explainer: what is CITES and why should we care?" (18 September 2016), available at http://theconversation.com/explainer-what-is-cites-and-why-should-we-care-65510. See also, e.g., United Nations Environment Programme, *The Democratic Republic of the Congo …* (footnote 65 above), pp. 24–26.

[111] See B. Sjöstedt, *Protecting the Environment in Relation to Armed Conflict. The Role of Multilateral Environmental Agreements*, doctoral dissertation (Lund, Lund University, 2016), pp. 221–227, and B. Sjöstedt, "The ability of environmental treaties to address environmental problems in post-conflict", in C. Stahn, J. Iverson, and J.S. Easterday (eds.), *Environmental Protection and Transitions from Conflict to Peace* (Oxford, Oxford University Press, 2017), pp. 73–92; D. Dam-de Jong, *International Law and Governance of Natural Resources in Conflict and Post-Conflict Situations* (Cambridge, Cambridge University Press, 2015), pp. 138–143.

[112] United Nations Convention against Corruption (New York, 31 October 2003), United Nations, *Treaty Series*, vol. 2349, No. 42146, p. 41.

[113] United Nations Convention against Transnational Organized Crime (New York, 15 November 2000), *ibid.*, vol. 2225, No. 39574, p. 209.

aspect of the conflict in the Democratic Republic of the Congo.[114] The United Nations Environment Programme and INTERPOL have reported that the illegal exploitation of natural resources in armed conflicts is increasingly part of the larger global network of environmental crime.[115] Frequently characterized by poor governance, widespread corruption and poor protection of resource rights, post-conflict situations are vulnerable to exploitation in transnational environmental crime.[116] The Security Council has drawn attention to the connections between transnational criminal networks, terrorist groups and armed conflicts, including in relation to illicit trade in natural resources, and has urged States, as a matter of priority, to ratify the two above-mentioned Conventions.[117] The General Assembly, in the context of countering crimes that have an impact on the environment, such as illicit trafficking in wildlife and wildlife products, has called on States to make more effective use of the United Nations Convention on Transnational Organized Crime.[118]

30. Much of the Security Council's direct action against illegal exploitation of natural resources in conflict has addressed the external links, including private sector interests, that sustain exploitation and make it profitable. This has taken place through commodity sanctions and, in certain cases, sanctions against individuals and private companies,[119] but has also included the promotion of new regulatory frameworks aimed at promoting due diligence by private companies present in or trading with conflict areas.[120] The Kimberley process certification scheme was foremost of efforts to engage private companies, on a voluntary basis, in the efforts to prevent illegal trade in natural resources.[121] Furthermore, the Security Council actively promoted efforts to prevent illicit trade in the natural resources of the Democratic Republic of the Congo. This has included initiating the creation of the due diligence guidelines for importers, processing industries and consumers of Congolese mineral products,[122] as well as providing support for their implementation, with the possibility of imposing financial and travel sanctions in case of failure to exercise due diligence.[123] The Security Council also supported the creation of the certification mechanism of the

[114] Final report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo (S/2002/1146, annex), paras. 5, 12, 19 and 20.

[115] Nellemann *et al.*, *The Rise of Environmental Crime* … (footnote 64 above), p. 7.

[116] Corruption has been identified as the most important enabling factor behind illegal trade in wildlife and timber. See Nellemann *et al.*, *The Rise of Environmental Crime* … (footnote 64 above), p. 25: transnational environmental crime thrives in permissive environments). See also C. Cheng and D. Zaum, "Corruption and the role of natural resources in post-conflict transitions", in Bruch, Muffett, and Nichols (eds.), *Governance, Natural Resources, and Post-Conflict Peacebuilding* (footnote 62 above), pp. 461–480.

[117] Security Council resolution 2195 (2014), para. 3. Similarly, see United Nations Environmental Assembly resolutions 2/15 of 27 May 2016, para. 4, and 3/1 of 6 December 2017, paras. 2 and 3.

[118] General Assembly resolution 69/314 of 30 July 2015, paras. 2–5. Paragraph 4 calls upon States to make illicit trafficking in protected species of wild fauna and flora involving organized criminal groups a serious crime in the sense of article 2 (*b*) of the Convention. Paragraph 5 calls upon States to make sure that offences connected to the illegal wildlife trade are treated as predicate offences, as defined in the Convention, for the purposes of domestic money-laundering offences, and are actionable under domestic proceeds of crime legislation. See also Security Council resolution 2134 (2014) and 2136 (2014) on the Security Council's sanctions against persons and entities involved in wildlife poaching and trade.

[119] See, e.g., Security Council resolution 1857 (2008).

[120] See Security Council Report, *UN Sanctions: Natural Resources*. Research Report No. 4 (2015). See also Dam-de Jong, *International Law and Governance of Natural Resources in Conflict and Post-Conflict Situations* (footnote 111 above), pp. 267–365.

[121] Security Council resolution 1295 (2000), paras. 16–19.

[122] Final report of the Group of Experts on the Democratic Republic of the Congo prepared pursuant to paragraph 6 of Security Council resolution 1896 (2009) (S/2010/596), paras. 327–369.

[123] Security Council 1952 (2010), paras. 8, 9 and 20.

International Conference on the Great Lakes Region, which has been said to constitute the principal mechanism for implementing obligations under the Lusaka Protocol.[124]

31. The attention given by the Security Council to external actors, such as private companies, in addition to armed groups and their leaders, builds on the experience accumulated by United Nations panels of experts that such third parties often play a central role in the illegal exploitation of natural resources. The Panel of Experts on the Democratic Republic of the Congo, for instance, compiled an extensive list of business enterprises and individuals whose involvement in the commercial activities of the three main organized criminal networks in the country was well-documented.[125] It further proposed that restrictive measures be imposed on nearly 30 companies[126] and more than 50 individuals involved in arms supply and resource plundering.[127] In addition, the Panel presented a list of no less than 85 business enterprises that it considered to be in violation of the Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises.[128] It concluded that the "international and multinational dimension of these illegal activities [was] very important".[129] These findings are corroborated by research.[130] For example, a study on natural resource provisions in 94 peace agreements in 27 countries concludes that the role of such provisions is limited if the natural resources in question are traded regionally or globally. In such cases, regional or global market regulation was seen to provide a more effective way to prevent illegal exploitation.[131]

32. An example of regulation at the regional level, the International Conference on the Great Lakes Region Regional Certification Mechanism was prepared in tandem with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas of 2013.[132] The OECD guidance, *inter alia*, recommends that States[133] promote the observance of the guidelines by companies operating from their territories and sourcing minerals from conflict-affected and high-risk areas "with the aim of ensuring that they respect human rights, avoid contributing to conflict and successfully contribute to sustainable, equitable and effective development".[134] "Conflict-affected and high-risk areas" are defined in

[124] P. Okowa, "Sovereignty contests and the protection of natural resources in conflict zones", *Current Legal Problems*, vol. 66 (2013), pp. 33–73, p. 63. For the certification mechanism, see www.icglr-rinr.org/index.php/en/certification (last accessed on 4 February 2019); for the other tools to curb illegal exploitation of natural resources in the Great Lakes region, see www.icglr.org/index.php/en/six-tools (last accessed on 4 February 2019).

[125] Security Council resolution 1896 (2009), para. 7. See also S/2002/1146, para. 174.

[126] S/2002/1146, annex I.

[127] *Ibid*., annex II.

[128] *Ibid*., annex III.

[129] *Ibid*., para. 156. See also Security Council resolution 1457 (2003), paras. 14–16.

[130] See, e.g., K. Roberts, "Corporate liability and complicity in international crimes", in S. Jodoin and M-C. Cordonier Segger (eds.), *Sustainable Development, International Criminal Justice, and Treaty Implementation* (Cambridge, Cambridge University Press, 2013), pp. 190–211, at pp. 191–193.

[131] S.J.A. Mason, D.A. Sguaitamatti and M.D.P. Ramiréz Gröbli, "Stepping stones to peace? Natural resource provisions in peace agreements", in Bruch, Muffett, and Nichols (eds.), *Governance, Natural Resources, and Post-Conflict Peacebuilding* (footnote 62 above), pp. 71–119, at p. 91.

[132] OECD, *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*, 2nd ed. (Paris, 2013). Available at http://dx.doi.org/10.1787/9789264185050-en (last accessed on 3 December 2018). See also OECD, *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*, 3rd ed. (Paris, 2016). Available at http://dx.doi.org/10.1787/9789264252479-en (last accessed on 3 December 2018).

[133] Referring to OECD member States and States having adhered to the Declaration on International Investment and Multinational Enterprises.

[134] OECD, *OECD Due Diligence Guidance …*, 3rd ed. (footnote 132 above), recommendation, pp. 7–9.

terms of "the presence of armed conflict, widespread violence or other risks of harm to people. Armed conflict may take a variety of forms such as a conflict of international or non-international character, which may involve two or more States, or may consist of wars of liberation, or insurgencies, civil wars, etc."[135] The OECD guidance encourages companies operating in or sourcing minerals from conflict-affected and high-risk areas to assess and avoid the risk of being involved in serious human rights violations. Observance of the guidance, however, is voluntary and not legally enforceable.[136]

33. The OECD guidance has also inspired the Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains.[137] The Chinese guidelines require that companies identify and assess the risks of contributing to conflict and serious human rights abuses associated with extracting, trading, processing, and exporting resources from conflict-affected and high-risk areas,[138] as well as risks associated with serious misconduct in environmental, social and ethical issues.[139] The guidelines contain a detailed list of environmental risks related to extracting or sourcing natural resources, as well as a model supply chain policy. The Chinese guidelines furthermore require that companies publicly report on their supply chain due diligence policies and practices, including on identified risks and steps taken to mitigate these risks.[140] Companies using or engaged in the supply chain of other natural resources are also encouraged to use the guidelines as a reference.

34. Due diligence frameworks have also been created for specific business sectors, including extractive industries. These include the Extractive Industries Transparency Initiative, which aims at increasing transparency in the management of oil, gas, and mining revenues,[141] the Voluntary Principles on Security and Human Rights for extractive industry companies,[142] and the Equator Principles of the financial industry for determining, assessing and managing social and environmental risk in project financing.[143] All these frameworks have been created through cooperation between States, businesses and civil society.

35. While all the normative frameworks referred to above are voluntary, some States have incorporated internationally agreed non-binding standards into their national legislation, making them binding on companies and creating the possibility of legal responsibility for breach. One example of such legislation is the United States Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, with section 1502 on conflict minerals originating from the Democratic Republic of the Congo.[144] Section 1502 requires that companies registered in the United States exercise due diligence on certain minerals (tin, tantalum, tungsten and gold) originating from the

[135] *Ibid.*, p. 13.
[136] *Ibid.,* p. 16.
[137] China, Chamber of Commerce of Metals, Minerals and Chemicals Importers and Exporters *Chinese Due Diligence Guidelines for Responsible Mineral Supply Chains*. Available at http://mneguidelines.oecd.org/chinese-due-diligence-guidelines-for-responsible-mineral-supply-chains.htm (last accessed on 3 December 2018). The guidelines apply to all Chinese companies that are extracting and/or using mineral resources and their related products and come into play at any point in the supply chain of minerals.
[138] *Ibid.*, sect. 5.1.
[139] *Ibid*., sect. 5.2.
[140] *Ibid.,* sect. 7.5.
[141] Information available at http://eiti.org (last accessed on 3 December 2018).
[142] Information available at www.voluntaryprinciples.org (last accessed on 3 December 2018).
[143] Information available at www.equator-principles.com (last accessed on 3 December 2018).
[144] An Act to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end "too big to fail", to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes (Dodd–Frank Act), 11 July, 2010, Pub.L.111–203, 124 Stat. 1376–2223.

Democratic Republic of the Congo, ascertaining and reporting to the regulators on the measures taken to ensure that they are not trading in minerals that directly or indirectly finance the armed conflict in the Democratic Republic of the Congo. The more recent regulation of the European Union on conflict minerals keeps the same list of four minerals but is geographically broader, laying down supply chain due diligence obligations for European Union importers "of tin, tantalum and tungsten and their ores, and gold originating from conflict-affected and high-risk areas".[145] Both the United States law and the European Union regulation seek to help break the link between conflict and illegal exploitation of mineral resources. There is no explicit focus on environmental protection in either, but this goal can be seen as implicit in the notion of responsible sourcing.

36. One of the objectives of the European Union regulation is also to promote responsible business practices outside the European Union. Once in force, the regulation will require that importers within the European Union identify smelters and refiners in their supply chains and check whether they have the correct due diligence practices in place. The European Commission will furthermore create a "white-list" of global smelters and refiners who source responsibly.[146] The regulation contains obligations both on companies and on member States. Member States are required to lay down rules applicable to infringements of the regulation,[147] and shall report to the Commission on the implementation of the regulation.[148] In contrast to the OECD due diligence guidance or the Dodd-Franck law, the European Union regulation thus includes mandatory measures. Regular monitoring is also envisaged in the form of reporting by the Commission to the European Parliament and the European Council on the implementation of the regulation and its effectiveness. Where necessary, the Commission shall propose further mandatory measures.[149]

37. The European Union timber regulation lays down obligations on operators who import timber or timber products to the European Union.[150] Operators are required to exercise due diligence so as to minimize the risk of placing illegally harvested timber, or timber products containing illegally harvested timber, on the European Union market. Key to the due diligence system is a risk management exercise (involving information, risk assessment, and mitigation) that operators are required to undertake.[151] Voluntary Partnership Agreements,[152] which are part of a broader forest and trade framework,[153] seek to ensure that timber imported to the European Union from countries under these agreements is legally harvested. Such agreements have been concluded, for instance, with Ghana and Liberia, and negotiations are ongoing

[145] Regulation (EU) 2017/821 of the European Parliament and of the Council of 17 May 2017 laying down supply chain due diligence obligations for Union importers of tin, tantalum and tungsten, their ores, and gold originating from conflict-affected and high-risk areas, *Official Journal of the European Union*, L130, p. 1. The regulation will enter into force on 1 January 2021.

[146] *Ibid*., art. 9. See also http://ec.europa.eu/trade/policy/in-focus/conflict-minerals-regulation/regulation-explained/.

[147] *Ibid.*, art. 16.

[148] *Ibid.*, art. 17.

[149] Including on the competence to impose penalties upon European Union importers in the event of persistent failure to comply with the obligations set out in the regulation. *Ibid.*, art. 17, para. 3.

[150] Regulation (EU) No. 995/2010 of the European Parliament and of the Council of 17 May 2017 laying down the obligations of operators who place timber and timber products on the market, *Official Journal of the European Union*, L 295, p. 23.

[151] *Ibid.,* arts. 4 and 6.

[152] See Council Regulation (EC) No. 2173/2005 of 20 December 2005 on the establishment of a FLEGT [forest law enforcement, governance and trade] licensing scheme for imports of timber into the European Community, *Official Journal of the European Union*, L 347, p. 1.

[153] See communication from the Commission to the Council and the European Parliament, "Forest law enforcement, governance and trade (FLEGT): proposal for an EU action plan" (COM (2003) 251 final).

with other countries, including Côte d'Ivoire and the Democratic Republic of the Congo.[154]

38. The brief overview of the applicable rules above shows that there is a firm basis in the law of armed conflict for the prohibition of the worst forms of misappropriation of resources in armed conflict, which can be characterized as pillage. More generally, the particular challenges related to the extraction of minerals and other high-value natural resources in areas of armed conflict and in post-conflict situations have been addressed by way of non-binding standard-setting, as well as national and regional initiatives that seek to ensure that natural resources are purchased and obtained in a responsible manner. In some cases, those initiatives have provided the impetus for States to incorporate standards into their national legislation to make them binding on corporations subject to their jurisdiction that operate in or deal with conflict-affected areas. Such standards may not, however, always have a clear environmental focus.

B. Environmental effects of human displacement

39. Population displacement typically follows the outbreak of an armed conflict, giving rise to significant human suffering, as well as environmental damage. The United Nations Environment Programme has reported on "the massive movement of refugees and internally displaced people … across the country" as perhaps "the most immediate consequence of the conflict" in Liberia,[155] as well as of "clear and significant" "links between displacement and the environment" in the Sudan.[156] In Rwanda, the population displacement and resettlement caused by the 1990–1994 conflict and genocide "had a major impact on the environment, substantially altering land cover and land use in many parts of the country".[157] As more than 2 million people moved in and out of the country, up to 800,000 people in camps along the border to the Democratic Republic of the Congo had to rely on firewood from the nearby Virunga National Park.[158] The interconnectedness of providing relief for those displaced by armed conflict and reducing the impact of displacement on the environment has been increasingly recognized.

40. In a 2014 study on protection of the environment during armed conflict, the International Law and Policy Institute in Oslo emphasized the humanitarian and environmental impacts of displacement in various conflicts, such as those in Colombia and the Democratic Republic of the Congo and the Russo-Georgian war, noting with reference to the Democratic Republic of the Congo in particular, that the "massive conflict-induced displacement of civilian populations associated with protracted conflict may have even more destructive effects [on] the environment than actual combat operations".[159] Non-international armed conflicts, in particular, were

[154] European Commission, "FLEGT Regulation – FLEGT Voluntary Partnership Agreements (VPAs)". Available at http://ec.europa.eu/environment/forests/flegt.htm (last accessed on 15 December 2018).

[155] United Nations Environment Programme, *Desk Study on the Environment in Liberia* (footnote 66 above), p. 23.

[156] United Nations Environment Programme, *Sudan Post-Conflict Environmental Assessment* (Nairobi, 2007). Available at http://wedocs.unep.org/handle/20.500.11822/22234, p. 115 (last accessed on 15 December 2018).

[157] United Nations Environment Programme, *Rwanda: From Post-Conflict to Environmentally Sustainable Development* (Nairobi, 2011), p. 74. Available at https://postconflict.unep.ch/publications/UNEP_Rwanda.pdf.

[158] *Ibid*., pp. 65–66.

[159] International Law and Policy Institute, *Protection of the Natural Environment in Armed Conflict: An Empirical Study*, Report 12/2014 (Oslo, 2014), p. 5.

seen to cause the most important effects in terms of displacement, including the environmental strain in the affected areas.[160]

41. According to the Office of the United Nations High Commissioner for Refugees (UNHCR), typical environmental concerns associated with refugee or returnee situations include degradation of renewable natural resources and irreversible impacts on natural resources, such as damage caused to endangered species, soil erosion, deforestation, and land degradation.[161] The United Nations Environment Programme has enumerated the environmental consequences of displacement and subsequent resettlement as follows: deforestation and de-vegetation in camp areas; unsustainable groundwater extraction and water pollution in camp areas; uncontrolled urban slum growth; the development of a "relief economy", which can locally exacerbate demand for natural resources; fallow area regeneration and invasive weed expansion; and return- and recovery-related deforestation.[162]

42. Particular environmental consequences are related to the presence of displaced people in vulnerable areas. In Darfur, for instance, areas around the larger camps were reported to be "severely degraded".[163] Although this was not a new phenomenon, as a United Nations Environment Programme report noted, the scale of displacement and the particular vulnerability of the dry northern Sudanese environment made it particularly serious.[164] Attention was furthermore drawn to the fact that, in many camps for refugees and internally displaced persons, sites were exposed and vulnerable to various degrees of erosion and flooding. When trees are cut down, especially on hillsides and in zones with fragile soils, serious erosion, landslides, drying of perennial streams and low agricultural productivity may result in the medium and long term.[165]

43. UNHCR, as one of the most experienced actors working with refugees and returnees, drew up its first Environmental Guidelines in 1996, acknowledging that some environmental damage is bound to result from large concentrations of people rapidly gathering in one location. The elimination of all adverse environmental impacts is therefore impossible, but the mitigation of such impacts is a reasonable policy objective.[166]

44. The 2005 edition of the UNHCR Environmental Guidelines notes that considerations relating to access to water, the location of refugee camps and settlements, and food aid from relief and development agencies "all have a direct bearing on the environment".[167] As indicated by the Guidelines, uninformed decisions concerning the siting of a refugee camp in or near a fragile or internationally protected area may result in irreversible – local and distant – impacts on the environment. "Particularly serious are impacts on areas of high environmental value that may be

[160] *Ibid.*, p. 6.
[161] UNHCR, *UNHCR Environmental Guidelines* (Geneva, 2005). Available at http://www.refworld.org/docid/4a54bbd10.html, pp. 7–8 (last accessed on 19 February 2019).
[162] United Nations Environment Programme, *Sudan Post-Conflict Environmental Assessment* (footnote 156 above), pp. 92–95.
[163] *Ibid*., p. 9.
[164] United Nations Environment Programme, *Sudan Post-Conflict Environmental Assessment: Synthesis Report* (Nairobi, 2007), p. 7. Available at http://wedocs.unep.org/handle/20.500.11822/7712.
[165] *Ibid*., pp. 7–9.
[166] UNHCR, *UNHCR Environmental Guidelines* (Geneva 1996), p. 3. Available at www.refworld.org/pdfid/42a01c9d4.pdf (last accessed on 15 February 2019). See also UNHCR, *UNHCR Environmental Guidelines* (2005) (footnote 161 above), p. 7.
[167] UNHCR, *UNHCR Environmental Guidelines* (2005) (footnote 161 above), p. 5.

related to the area's biological diversity, its function as a haven for endangered species or for the ecosystem services these provide."[168]

45. The Guidelines further note that the "state of the environment, in turn, will have a direct bearing on the welfare and well-being of people living in that vicinity, whether refugees, returnees or local communities".[169] Providing sustainable and resilient livelihoods for displaced people is thus intimately connected to preserving and protecting the environment in which such communities are located. Better environmental governance increases resilience for host communities, displaced persons, and the environment as such.

46. Similarly, the International Organization for Migration highlights "reducing the vulnerability of displaced persons as well as their impacts on the receiving society and ecosystem" as an emerging issue that requires addressing,[170] and has developed an Atlas of Environmental Migration.[171] It can be mentioned that the World Bank had drawn attention to the issue in 2009 as part of the report "Forced displacement – The development challenge".[172] The report highlighted the development impacts that displacement can have on environmental sustainability and development, including through environmental degradation.[173]

47. Article 40 on military and hostile activities[174] of the revised (2015) edition of the Draft Covenant on Environment and Development of the International Union for Conservation of Nature remains largely unchanged from the 2010 version. One of the few changes that has been made is the inclusion of an additional paragraph on displacement, which reads as follows: "Parties shall take all necessary measures to provide relief for those displaced by armed conflict, including internally displaced persons, with due regard to environmental obligations".[175]

48. In the 2009 African Union Convention for the Protection of Internally Displaced Persons in Africa, also known as the Kampala Convention, article 9, paragraph 2 (*j*), stipulates that State Parties shall "[t]ake necessary measures to safeguard against environmental degradation in areas where internally displaced persons are located, either within the jurisdiction of the State Parties, or in areas under their effective control".[176]

49. A number of States have called for the impacts of displacement to be included in the consideration of the present topic.[177] The issue warrants addressing in this

[168] *Ibid.*, p. 7.
[169] *Ibid*., p. 5.
[170] International Organization for Migration, *Compendium of Activities in Disaster Risk Reduction and Resilience* (Geneva, 2013), as referenced in *IOM Outlook on Migration, Environment and Climate Change* (Geneva, 2014), p. 82.
[171] D. Ionesco, D. Mokhnacheva, F. Gemenne, *The Atlas of Environmental Migration*, (Abingdon, Routledge 2019).
[172] A. Christensen and N. Harild, "Forced displacement – The development challenge" (Social Development Department, The World Bank Group, Washington, D.C., 2009).
[173] *Ibid*., pp. 4 and 11.
[174] Formerly art. 38.
[175] International Union for Conservation of Nature, Draft Covenant on Environment and Development, art. 40. Available at www.iucn.org.
[176] African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa (Kampala, 23 October 2009), art. 9, para. 2 (*j*). Available at https://au.int/en/treaties/african-union-convention-protection-and-assistance-internally-displaced-persons-africa (last accessed on 15 January 2019). The Convention entered into force on 6 December 2012.
[177] Peru has noted that "mass displacements of people in conflict zones had led to severe deforestation, soil degradation and excessive exploitation of underground water resources in the vicinity of huge camps established for displaced persons", see second report of Ms. Jacobsson (A/CN.4/685), para. 50. See also: South Africa (A/C.6/68/SR.24, para. 28): "In addition to the Special Rapporteur's proposal on aspects on which the Commission should focus in further work

context because of the increased interest of States, scholarly writing and the practice of international organizations in the issue of conflict-related displacement in connection with the protection of the environment.

C. Proposed draft principles

50. In the light of the above, the following draft principles are proposed:

Draft principle 13 *ter*

Pillage

Pillage of natural resources is prohibited.

Draft principle 6 *bis*

Corporate due diligence

States should take necessary legislative and other measures to ensure that corporations registered or with seat or centre of activity in their jurisdiction exercise due diligence and precaution with respect to the protection of human health and the environment when operating in areas of armed conflict or in post-conflict situations. This includes ensuring that natural resources are purchased and obtained in an equitable and environmentally sustainable manner.

Draft principle 14 *bis*

Human displacement

States and other relevant actors should take appropriate measures to prevent and mitigate environmental degradation in areas where persons displaced by conflict are located, while providing relief for such persons and local communities.

III. Responsibility and liability of non-State actors

A. Armed non-State actors

1. Legal accountability of organized armed groups

51. Multiple actors other than States may be present or involved in an armed conflict. As far as non-international armed conflicts are concerned, this can include non-State armed groups of different affiliations and degrees of organization, international or regional organizations, private companies, criminal groups and non-governmental organizations. There is no established definition of the term "non-State actor" in international law but the International Law Association has used a working definition that excludes intergovernmental organizations comprised solely of State members, illegal and illegitimate organized bodies (such as mafia), and illegal groups that are not organized in any particular manner.[178] This working definition provides a

on the topic, it would also be useful to consider refugee law and the law applicable to internally displaced persons"; Iran (Islamic Republic of) (A/C.6/68/SR.26, para. 9): "The Commission should focus in particular on the measures that States needed to take once hostile activity had ceased in order to rehabilitate the environment"; Peru (A/C.6/69/SR.25, para. 124); and Malaysia (A/C.6/69/SR.27, para. 47). *Cf.* Russian Federation (A/C.6/69/SR.25, para. 102), not believing the issue to be directly related to the topic.

[178] International Law Association, "Final Report of the Committee on Non-State Actors", report

useful frame for the present consideration, in particular as most of the attention paid to questions of international responsibility of non-State actors has been related to either organized armed groups or certain types of private companies, particularly multinational enterprises and private military companies.

52. It is generally accepted that organized armed groups, as parties to an armed conflict, are bound by the law of armed conflict. The relevant treaties address all parties to a conflict,[179] and the obligation of all parties to a non-international armed conflict to comply with international humanitarian law has been frequently recalled by the Security Council[180] and the General Assembly.[181] Furthermore, the obligation of armed groups to comply with customary international humanitarian law gets support from international jurisprudence.[182] The Commission, too, has recognized the possibility that a non-State armed group "may itself be held responsible for its own conduct under international law, for example for a breach of international humanitarian law committed by its forces".[183]

53. Non-State armed groups are increasingly also seen as capable of violating international human rights law. Security Council resolutions frequently refer to abuses or violations of human rights by armed non-State actors. A recent analysis of over 125 Security Council resolutions, 65 General Assembly resolutions and 50 Security Council presidential statements concludes that the two bodies have recognized, at a minimum, that the conduct of at least some armed non-State actors can amount to violations or abuses of human rights.[184] Moreover, the analysis concludes that the Security Council appears to assume that such actors, or some of them, may bear the responsibility for taking appropriate steps to protect a relevant

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submitted to the Seventy-Seventh Conference held in Johannesburg in August 2016 (2017), para. 20. For the definition and criteria for exclusion/inclusion, see paras. 18 and 19.

[179] According to common article 3 of the Geneva Conventions "each Party to the conflict shall be bound to apply" its provisions, see, e.g., Geneva Convention IV. See also Additional Protocol II. According to art. 1, para. 1, of Additional Protocol II, the Protocol "develops and supplements" common article 3 "without modifying its existing conditions of application". At the same time, Additional Protocol II only applies to "dissident armed forces or other organized armed groups which, under responsible command, exercise such control over a part of its territory as to enable them to carry out sustained and concerted military operations and to implement this Protocol". See also Henckaerts and Doswald-Beck, *Customary International Humanitarian Law: Rules*, vol. I (footnote 83 above), rule 139, pp. 495–498; see also ICRC commentary (2016) on Geneva Convention I, art. 3, paras. 503–508, and S. Sivakumaran, "Binding armed opposition groups", *International and Comparative Law Quarterly*, vol. 55 (2006), pp. 369–394.

[180] See, e.g., Security Council resolutions 2286 (2016) and 2139 (2014)

[181] See, e.g., General Assembly resolution 73/204 of 20 December 2018.

[182] According to the Special Court for Sierra Leone, "[c]ustomary international law represents the common standard of behaviour within the international community, thus even armed groups hostile to a particular government have to abide by these laws". See *Prosecutor v. Sam Hinga Norman,* SCSL-2004-14-AR72(E), Decision on preliminary motion based on lack of jurisdiction (Child recruitment), Appeals Chamber, Special Court for Sierra Leone, 31 May 2004, para. 22. See also *Prosecutor v. Morris Kallon and Brima Buzzy Kamara* SCSL-2004-15-AR72(E) and SCSL-2004-16-AR72(E), Decision on challenge to jurisdiction: Lomé Accord amnesty, Appeals Chamber, Special Court for Sierra Leone, 13 March 2004, para. 47. See, furthermore, report of the International Commission of Inquiry on Darfur to the Secretary-General pursuant to Security Council resolution 1564 (2004) of 18 September 2004 (S/2005/60), para. 172.

[183] Para. (16) of the commentary to art. 10 of the articles on responsibility of States for responsibility of States for internationally wrongful acts (hereinafter, "articles on State responsibility"), *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76-77, at p. 52. See also General Assembly resolution 56/83 of 12 December 2001, annex.

[184] J.S. Burniske, N.K. Modirzadeh and D.A. Lewis, *Armed Non-State Actors and International Human Rights Law: An Analysis of the Practice of the U.N. Security Council and U.N. General Assembly*, Briefing report with annexes (Harvard Law School Program on International Law and Armed Conflict, 2017), p. 27. Available from https://pilac.law.harvard.edu (last accessed on 8 January 2019).

civilian population, consistent with human rights.[185] Reference can also be made to the special procedure mechanisms of the Human Rights Council, the mandate holders of which have taken the view that non-State armed groups exercising control over a territory and having a political structure can be expected to comply with human rights standards.[186] More controversially, it has been submitted that when armed non-State groups exercise territorial control and administer a territory, they should comply with the law of occupation.[187]

54. Unilateral commitments by non-State armed groups to comply with international humanitarian law are fairly frequent[188] and may also specifically touch on environmental issues.[189] Similarly, respect for international humanitarian law or international human rights law, or mechanisms to implement such law, can be the subject of special agreements between parties to a non-international armed conflict, including peace agreements.[190] It is not, however, always clear to what extent such a

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[185] *Ibid.*

[186] S. Sivakumaran, *The Law of Non-International Armed Conflict* (Oxford, Oxford University Press, 2012), p. 530. See also J.-M. Henckaerts and C. Wiesener, "Human rights obligations of non-State armed groups, a possible contribution from customary international law?", in R. Kolb and G. Gaggioli (eds.), *Research Handbook on Human Rights and Humanitarian Law* (Cheltenham, Edward Elgar, 2013), pp. 146–169, at p. 154. See also report of the Secretary-General's Panel of Experts on Accountability in Sri Lanka, 31 March 2011, para. 188.

[187] Sivakumaran, *The Law of Non-International Armed Conflict* (previous footnote), p. 531; Dam-de Jong, *International Law and Governance of Natural Resources in Conflict and Post-Conflict Situations* (footnote 111 above), p. 259; E. Benvenisti, *The International Law of Occupation*, 2nd ed. (Oxford, Oxford University Press, 2012), pp. 60–61. For such a situation, see, e.g. P. N. Okowa, "Natural resources in situations of armed conflict: is there a coherent framework for protection?", *International Community Law Review*, vol. 9 (2007), pp. 237–262, at p. 253, referring to two Congolese rebel groups acting as *de facto* government and exercising "administrative control including collecting taxes from multinationals and discharging day to day civic duties" without a challenge from the *de jure* government.

[188] E. Kassoti, "*Ad hoc* commitments by non-State armed actors: the continuing relevance of State consent", in J. Summers and A. Gough (eds.), *Non-State Actors and International Obligations. Creation, Evolution and Enforcement*, (Leiden, Brill Nijhoff, 2018), pp. 86–105.

[189] Examples of such commitments include those following. Kurdistan Workers' Party (operating in Turkey and Iraq): the Party's 2011 Rules for the Conduct of War contain two provisions, according to which (*a*) forests will not be burned or otherwise destroyed and (*b*) weapons that burn, such as napalm, lava, and phosphorous, or create destruction to humans, plants, animals and the ecological balance shall not be used. Ejército de Liberación Nacional (National Liberation Army) (Colombia): their 1995 Code of War contained the following provision: "Acts of sabotage shall, as far as possible, avoid causing environmental damage". The Sudan People's Liberation Movement/Army resolution of 1991 stated that it "shall do everything to … protect and develop [our wildlife resources] for us and for posterity". Chin National Front (active with ceasefire in Myanmar): their undated Guidelines on the Code of War state that the use of weapons and technologies that can damage the environment for a very long period of time must be avoided. The Lord's Resistance Army (active in several central African States) made commitments related to the protection of endangered species in Garamba Park, not to attack the rangers "as long as they identified themselves and did not attack [Lord's Resistance Army] forces" – it is reported, however, that the Lord's Resistance Army continued to launch attacks inside the park and kill rangers, as well as to poach elephants to finance operations (see www.nationalgeographic.com/tracking-ivory/article.html). For a comprehensive collection of unilateral commitments by armed groups, see Geneva Call, directory of international humanitarian law commitments by armed non-State groups: "Their Words", http://theirwords.org (last accessed on 10 January 2019). See also J.M. Henckaerts and L. Doswald-Beck, *Customary International Humanitarian Law: Practice*, vol. II (Cambridge, Cambridge University Press, 2005), part II, chap. 14, p. 862, paras. 85 and 86.

[190] For the concept of "special agreement", see common art. 3 of the Geneva Conventions of 12 August 1949 and the ICRC commentary (2016) to the Geneva Convention I, art. 3, paras. 841–855. For examples from practice, see para. 849 of the latter.

commitment can be seen as legally binding on the group that has made it.[191] A further uncertainty applies to whether the courts of armed non-State groups can play a role in the enforcement of international humanitarian law.[192] This would be a logical corollary to the duty to "respect and ensure respect" for international humanitarian law,[193] and the Security Council has required "all warring factions, regardless of their governmental or non-governmental status, to enforce international humanitarian law, to end impunity, and to bring the alleged perpetrators to justice".[194] The possibility of establishing courts is also related to the criminal responsibility of commanders for war crimes committed by their subordinates, which is applicable both in international and non-international armed conflicts. The International Criminal Court has held in this regard that "the availability of a functional military judicial system within the [armed group] through which [a commander] could have punished crimes committed and prevented their future repetition" is an important element of the duty to punish crimes of subordinates.[195]

55. Common article 3 of the Geneva Conventions prohibits "the passing of sentences and the carrying out of executions without previous judgment pronounced by a regularly constituted court, affording all the judicial guarantees which are recognized as indispensable by civilized peoples".[196] While the notion of "regularly constituted court" is no longer exclusively interpreted as referring to the regular courts of a State,[197] questions can be raised regarding the actual capacity of armed groups to comply with the requisite judicial guarantees.[198] This was also made clear

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[191] See *Prosecutor v. Stanislav Galić*, Case No. IT-98-29-A, Judgment, Appeals Chamber, International Tribunal for the Former Yugoslavia, 30 November 2006, para. 119; *Prosecutor v. Tihomir Blaskić*, Case No. IT-95-14T, Decision, Trial Chamber, International Tribunal for the Former Yugoslavia, 3 March 2000, para. 172. See, however, *Kallon and Kamara* of the Special Court for Sierra Leone (footnote 182 above), para. 49, stating that "the Lomé Agreement is neither a treaty nor an agreement in the nature of a treaty. However, it does not need to have that character for it to be capable of creating binding obligations and rights between the parties to the agreement in municipal law".

[192] See J. Somer, "Jungle justice: passing sentence on the equality of belligerents in non-international armed conflict", *International Review of the Red Cross*, vol. 89 (2007), pp. 655 –690.See also Geneva Call, "Administration of justice by armed non-State actors. Report from the 2017 Garance talks". Available at https://genevacall.org/wp-content/uploads/dlm_uploads/2018/09/Garance Talks_Issue02_Report_2018_web.pdf (last accessed on 10 January 2019).

[193] See common art. 1 of the Geneva Conventions of 12 August 1949, as well as ICRC commentary (2016) to the Geneva Convention I, art. 3, para. 899.

[194] Sivakumaran, *The Law of Non-International Armed Conflict* (footnote 186 above), p. 555. See also Security Council resolutions 1479 (2003) on Côte d'Ivoire, para. 8; 1509 (2003) on Liberia, para. 10; 1962 (2010) on Côte d'Ivoire, para. 9; 2041 (2012) on Afghanistan, para. 32; 2139 (2014) on Syria, paras. 3 and 13.

[195] *Prosecutor v. Jean-Pierre Bemba Gombo,* Case No. ICC-01/05-01/08, Decision pursuant to article 61 (7) (a) and (b) of the Rome Statute on the charges of the Prosecutor, Pre-Trial Chamber, International Criminal Court, 15 June 2009, para. 501. See also *Bemba* Trial Chamber Judgment (Judgment pursuant to article 74 of the Statute, 21 March 2016), which states that "[t]he duty to punish includes, at least, the obligation to investigate possible crimes in order to establish the facts" (para. 207) and that "[i]f the commander has no power to sanction those who committed the crimes, he has an obligation to submit the matter to the competent authorities. This obligation to submit the matter also arises where the commander has the ability to take certain measures, but such measures would be inadequate" (para. 208).

[196] Geneva Convention I, art. 3, para. 1 (*d*).

[197] ICRC commentary (2016) to Geneva Convention I, art. 3, para. 692.

[198] See the lists of guarantees included in Additional Protocol II, arts. 4 and 6. See also International Criminal Court, *Elements of Crimes* (*Official Records of the Assembly of States Parties to the Rome Statute of the International Criminal Court, First session, New York, 3-10 September 2002* (United Nations publication, Sales No. E.03. V.2 and corrigendum), part II.B, and *Official Records of the Review Conference of the Rome Statute of the International Criminal Court, Kampala, 31 May–11 June 2010* (International Criminal Court publication, RC/9/11), resolution RC/Res.5), art. 8 (2) (c) (iv), para. 4: "There was no previous judgement pronounced by a court,

in a recent judgment of a Swedish district court confirming the capacity of non-State armed groups under international law to establish courts and carry out sentences.[199] The Court ruled that a non-State armed actor in a non-international armed conflict may establish its own courts for two purposes, namely upholding discipline within its own ranks and maintaining law and order in a territory it controls. Further conditions would be that: (*a*) the court consists of persons who were appointed as judges or officials in the judiciary prior to the outbreak of the conflict; (*b*) the court applies the law that was in force before the conflict or, at least, does not deviate from it substantially in a stricter direction; and (*c*) the court fulfils the requirement of independence and impartiality and meets the fundamental requirements of a fair trial.[200]

56. The non-governmental organization Geneva Call, on the basis of its dialogue with non-State armed groups, recommends that when such a group does not have the capacity to respect internationally recognized guarantees of fair trial, it shall not carry out judicial processes and should seek alternative mechanisms. When the structure of the group is not stable, it should only carry out judicial processes as long as it has the capacity to do so. When, however, a group has the capacity to carry out judicial processes in accordance with the established fair trial guarantees, everything feasible should be done to respect them in full. Armed groups are encouraged to seek advice and support in their attempt to comply with the relevant humanitarian norms.[201] Work is also ongoing, through a private initiative by the Manchester International Law Centre, the Syrian Legal Development Programme and Lawyers for Justice in Libya, to prepare guidelines for judicial processes in non-international armed conflicts.[202]

57. A further question is related to the possible obligation on armed non-State groups to provide reparations. The ICRC study on customary international humanitarian law refers to "some practice" in internal conflicts,[203] as well as to resolutions of the Security Council and the Human Rights Council,[204] but concludes that it is unclear whether armed opposition groups "are under an obligation to make

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or the court that rendered judgement was not 'regularly constituted', that is, it did not afford the essential guarantees of independence and impartiality, or the court that rendered judgement did not afford all other judicial guarantees generally recognized as indispensable under international law".

[199] Stockholms Tingsrätt, Avdelning 4, Dom 16 February 2017, Mål nr B 3787-16 [Stockholm District Court, Section 4, Judgment 16 February 2017, B 3787-16], paras. 26–34 and 38.

[200] *Ibid.*, para. 38. For an assessment of the judgment, see J. Somer, "Opening the floodgates, controlling the flow: Swedish Court rules on the legal capacity of armed groups to establish courts, EJIL Talk, 10 March 2017. Available at www.ejiltalk.org/opening-the-floodgates-controlling-the-flow-swedish-court-rules-on-the-legal-capacity-of-armed-groups-to-establish-courts/ (last accessed on 24 January 2019).

[201] Geneva Call, "Administration of justice by armed non-State actors …" (footnote 192 above), p. 15.

[202] More information is available at www.law.manchester.ac.uk/milc/research/projects/justice-in-niacs/.

[203] Henckaerts and Doswald-Beck, *Customary International Humanitarian Law: Rules*, vol. I (footnote 83 above), pp. 549–550, referring to the Comprehensive Agreement on Respect for Human Rights and International Humanitarian law in the Philippines, Part III, art. 2 (3) and Part IV, arts. 1 and 6, as well as to the practice of the ELN [National Liberation Army] in Colombia. Further practice includes the Agreement on accountability and reconciliation between the Government of Uganda and the Lord's Resistance Army/Movement (Juba, 29 June 2007), clauses 6.4 and 9, as well as the Annexure of 19 February 2008, clauses 16–18 (available at http://theirwords.org/ (last accessed on 22 January 2019)), as well as the Darfur Peace Agreement (Abuja, 5 May 2006), art. 194 (available at www.un.org/zh/focus/southernsudan/pdf/dpa.pdf (last accessed on 22 January 2019)).

[204] Henckaerts and Doswald-Beck, *Customary International Humanitarian Law: Rules*, vol. I (footnote 83 above), p. 550.

full reparation".[205] The Basic Principles on the Right to a Remedy and Reparation, while primarily based on obligations of States, leave the door open for the responsibility of "other entities".[206] The resolution of the International Law Association on reparations for victims of armed conflict refers to "responsible parties" who "shall make every effort to give effect to the rights of victims to reparation".[207] "Responsible party" means, in this context, States and international organizations, but the notion "may also include non-State actors other than international organizations".[208] The liability of non-State actors to pay reparations for violations of the law of armed conflict is thus recognized as a possibility and as a goal well worth pursuing.[209] For the time being, however, there are uncertainties regarding the legal basis for such obligations under international law.

58. In conclusion, while there are certain developments clarifying the status and international obligations of organized armed groups, a number of questions remain. The international responsibility of organized armed groups, while not a legally uncharted area, is a fragmented topic on which few solid conclusions can be drawn.[210]

2. Individual criminal responsibility

59. The rapid development of international criminal law since mid-1990s has removed many of the obstacles that had prevented the prosecution and investigation of serious violations of the law of armed conflict in the decades since the post-Second World war trials.[211] The jurisprudence of the *ad hoc* tribunals[212] and the reports of expert panels and commissions of inquiry have disclosed and analysed the context and characteristics of international crimes and contributed to the consolidation of the scattered elements of individual criminal responsibility under international law into a coherent whole. The Rome Statute of the International Criminal Court, notably building on the earlier work of the International Tribunal for the Former Yugoslavia

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[205] *Ibid.*

[206] Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law, General Assembly resolution 60/147 of 16 December 2005, annex, para. 15: "In cases where a person, a legal person, or other entity is found liable for reparation to a victim, such party should provide reparation to the victim or compensate the State if the State has already provided reparation to the victim". See also S/2005/60, para. 600: "It is in light of this international legal regulation that the obligation of the Sudan to pay compensation for all the crimes perpetrated in Darfur by its agents and officials or de facto organs must be seen. A similar obligation is incumbent upon rebels for all crimes they may have committed, whether or not the perpetrators are identified and punished".

[207] International Law Association, resolution No. 2/2010 on reparation for victims of armed conflict, adopted at the Seventy-Fourth Conference of the International Law Association held at The Hague on 15–20 August 2010, art. 11, para. 1.

[208] *Ibid*., art. 5.

[209] International Law Association, "Report of the Committee on Reparation for Victims of Armed Conflict (Substantive Issues)" (2010), pp. 11–13. The Committee "strongly encourages the further development of a regime of responsibility" for organized armed groups.

[210] See also the International Law Association, "Third report of the Committee on Non-State Actors" (2014), p. 11, according to which "the mechanism of direct responsibility of [organized armed groups] seems to be, at the very best, a doctrine *in statu nascendi*".

[211] The Geneva Conventions leave the prosecution of violations of common article 3 to the discretion of States on the basis of their national criminal law.

[212] See, e.g., *Prosecutor v. Duško Tadić a/k/a "DULE",* Case. No. IT-94-1-AR72, Decision on the Defense Motion for Interlocutory Appeal on Jurisdiction, Appeals Chamber, International Tribunal for the Former Yugoslavia, 2 October 1995, *Judicial Reports 1994–1995*, para. 134: "customary international law imposes criminal liability for serious violations of common Article 3, as supplemented by other general principles and rules on the protection of victims of internal armed conflict, and for breaching certain fundamental principles and rules regarding means and methods of combat in civil strife".

and the International Tribunal for Rwanda, provides for an extensive list of acts that may amount to crimes of genocide, crimes against humanity, war crimes, or the crime of aggression. The Statute also carefully defines various modes of liability covering different contributions to the criminal acts.[213] It furthermore contains elaborate guarantees of fair trial and provides for reparations to victims. In accordance with the complementarity principle, a number of States have enhanced their national capacities for the prosecution of the Rome Statute crimes.[214] The Rome Statute thus provides an essential framework for establishing the responsibility of those who have committed serious international crimes or contributed to their commission in a criminal way, including leaders or members of organized armed groups and persons supporting them.

60. The effectiveness of the Rome Statute framework in addressing environmental harm caused in conflict depends mainly on the substantive criminal law provisions. The sole crime specifically related to environmental damage, contained in article 8, paragraph 2 (*b*) (iv), of the Statute is only applicable in international armed conflict.[215] Several war crimes contained in article 8, paragraph 2 (*a*) and (*b*), addressing international armed conflicts, and in article 8, paragraph 2 (*c*) and (*e*), addressing non-international armed conflicts, may nevertheless be connected to environmental destruction.[216] The same holds true for certain crimes of genocide and crimes against humanity, which can also be committed in the context of an armed conflict. For instance, the Office of the Prosecutor of the International Criminal Court has established a connection between genocide and the deliberate destruction of the environment by systematically destroying properties, vegetation and water sources[217] and repeatedly destroying, polluting or poisoning communal wells or other communal

[213] See, e.g., R. Gallmetzer, "Prosecuting persons doing business with armed groups in conflict areas: the strategy of the Office of the Prosecutor of the International Criminal Court", *Journal of International Criminal Justice*, vol. 8 (2010), pp. 947 –956

[214] Reportedly, 65 countries have so far enacted legislation containing either complementarity or cooperation provisions, or both, into their domestic law. Thirty-five countries have some form of advanced draft implementing legislation. Information available at www.iccnow.org.

[215] "Intentionally launching an attack in the knowledge that such attack will cause incidental loss of life or injury to civilians or damage to civilian objects or widespread, long-term and severe damage to the natural environment which would be clearly excessive in relation to the concrete and direct overall military advantage anticipated." Rome Statute of the International Criminal Court (Rome, 17 July 1998), United Nations, *Treaty Series*, vol. 2187, No. 38544, p. 3.

[216] E.g., art. 8, para. 2 (*a*) (iii) (willfully causing great suffering, or serious injury to body or health); art. 8, para. 2 (*a*) (iv) (extensive destruction and appropriation of property, not justified by military necessity and carried out unlawfully and wantonly); art. 8, para. 2 (*b*) (v) (attacking or bombarding, by whatever means, towns, villages, dwellings or buildings which are undefended and which are not military objectives); art. 8, para. 2 (*b*) (xiii) (destroying or seizing the enemy's property unless such destruction or seizure be imperatively demanded by the necessities of war); art. 8, para. 2 (*b*) (xvi) (pillaging a town or place, even when taken by assault); art. 8, para. 2 (*b*) (xvii) (use of poison and poisoned weapons); art. 8, para. 2 (*b*) (xviii) (employing asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices). For war crimes in non-international armed conflicts, see art. 8, para. 2 (*e*) (v) (pillaging a town or place, even when taken by assault); art. 8, para. 2 (*e*) (xii) (destroying or seizing the property of an adversary unless such destruction or seizure be imperatively demanded by the necessities of the conflict); art. 8, para. 2 (*e*) (xiii) (employing poison or poisoned weapons); art. 8, para. 2 (*e*) (xiv) (employing asphyxiating, poisonous or other gases, and all analogous liquids, materials or devices).

[217] *Situation in Darfur, The Sudan*, Case No. ICC-02/05-157, Public redacted version of prosecution's application under article 58 filed on 14 July 2008, Pre-Trial Chamber, International Criminal Court, 12 September 2008, para. 200. The first warrant for arrest for Omar al Bashir, the President of Sudan, was issued on 4 March 2009, the second on 12 July 2010. In issuing the warrant, Pre-Trial Chamber I stated that there were reasonable grounds to believe that crimes against humanity, war crimes, and crimes of genocide were committed in Darfur by government forces. See www.icc-cpi.int/darfur/albashir/pages/alleged-crimes.aspx (last accessed 22 January 2019).

water sources[218] by the militia and Janjaweed in Darfur.[219] The same criminal conduct, which also included forcible displacement of populations, depriving them of the means of survival, and usurpation of land also constituted a basis for crimes against humanity charges.[220] Furthermore, the Prosecutor's application in the *Al Bashir* case included counts on war crimes, such as deliberate attacks against civilians and pillaging in relation to, *inter alia*, looting and burning of villages and bombing of water installations.[221]

61. There is established jurisprudence from the International Tribunal for the Former Yugoslavia [222] and the Special Court for Sierra Leone[223] on the war crime of pillage. The *Sesay, Kallon and Gbao* case (also known as the *RUF* case[224]) of the Special Court addresses a situation in which widespread and systematic looting of property was a key component of a common plan to regain power and control over the territory of Sierra Leone.[225] All three of the accused were found responsible for pillage, in addition to a number of other serious violations of international humanitarian law. The *Taylor* case is situated in the same context of illegal exploitation of natural resources.[226] Charles Taylor, former President of Liberia, had provided arms and ammunition to the RUF in exchange for diamonds[227] and was found responsible for aiding and abetting the commission of crimes in various parts of the country, as well as for planning their commission. The specific crimes in question included pillage, alongside other war crimes, crimes against humanity, and serious violations of international humanitarian law committed between 1996 and 2002 during the civil war of Sierra Leone.[228]

62. In line with the jurisprudence of the International Tribunal for the Former Yugoslavia, the *RUF* and *Taylor* cases address pillage only in connection of looting of private houses or taking of other private property. The Trial Chamber of the Special Court for Sierra Leone nevertheless stated, affirming the established understanding of pillage as a war crime, that the prohibition against pillage covers both organized

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[218] *Ibid*., para. 176.

[219] The general requirements of genocide were also met: "The magnitude, consistency and planned nature of the crimes detailed in this Application unequivocally demonstrate that the alleged acts of genocide took place in the context of a manifest pattern of similar conduct, in furtherance of [a] plan to destroy in substantial part each of the target groups." *Ibid*., para. 209.

[220] Art. 7, para. 1 (*a*) (murder); art. 7, para. 1 (*b*) (extermination); art. 7, para. 1 (*d*) (forcible transfer of population); art. 7, para. 1 (*f*) (torture); and art. 7, para. 1 (*g*) (rape). See *ibid*., paras. 210 and 211.

[221] *Ibid.*, paras. 213–234 and 243.

[222] *Prosecutor v. Goran Jelisić*, Case No. IT-95-10-T, Judgment, Trial Chamber, International Tribunal for the Former Yugoslavia, 14 December 1999; *Prosecutor v. Zejnil Delalić, Zdravko Mucić a/k/a "Pavo", Hazim Delić and Esad Landžo a/k/a "Zenga"*, Case No. IT-96-21-T, Judgement, International Tribunal for the Former Yugoslavia 16 November 1998, and Sentencing Judgement, Trial Chamber, International Tribunal for the Former Yugoslavia, 9 October 2001; *Prosecutor v. Tihomir Blaškić*, Case No. IT-95-14-T, Judgment (with Declaration of Judge Shahabuddeen), International Tribunal for the Former Yugoslavia, 3 March 2000, *Judicial Reports 2000*; *Prosecutor v. Dario Kordić and Mario Čerkez*, Case No. IT-95-14/2-T, Judgement, Trial Chamber, International Tribunal for the Former Yugoslavia, 26 February 2001.

[223] *Prosecutor v. Issa Hassan Sesay, Morris Kallon and Augustine Gbao*, Case No. SCSL-04-15-T, Judgment, Trial Chamber, Special Court for Sierra Leone, 2 March 2009. The accused belonged to the leaders of Revolutionary United Front, RUF.

[224] Sesay, Kallon and Gbao belonged to the leaders of RUF.

[225] *Sesay et al.* (footnote 223 above), para. 2071.

[226] *Prosecutor v. Charles Ghankay Taylor*, Case No. SCSL-03-1-T, Judgment, Trial Chamber, Special Court for Sierra Leone, 18 May 2012; *Prosecutor against Charles Ghankay Taylor*, Case No. SCSL-03-01-A, Judgment, Appeals Chamber, Special Court for Sierra Leone, 26 September 2013.

[227] *Taylor*, Appeals Judgment (previous footnote), para. 340.

[228] *Ibid.*, para. 13.

pillage and isolated acts of individuals and extends to all types of property, including State-owned and private property.[229] The elements of pillage were clarified in that case as follows: (*a*) the accused unlawfully appropriated the property; (*b*) the appropriation was without the consent of the owner; and (*c*) the accused intended to unlawfully appropriate the property.[230] The war crime of pillaging is also prosecutable under the Rome Statute, in both international and non-international conflicts. The Elements of Crime of the International Criminal Court, which provide further detail of the definitions of crimes contained in the Rome Statute, require that "[t]he perpetrator intended to deprive the owner of the property and to appropriate it for private or personal use".[231] While this requirement may be taken to restrict the scope of the crime, the purpose of the words "private or personal use", according to the accompanying footnote, is to make it clear that "appropriations justified by military necessity " cannot constitute the crime of pillaging.[232] It is furthermore doubtful whether the motive of private gain can ever be completely absent from pillaging, whether looting of private houses or illegal exploitation of natural resources.

63. The provisions of the Rome Statute on reparations are of a general nature and give the International Criminal Court broad powers to establish the general principles of reparations, including restitution, compensation and rehabilitation, and to determine the scope of damage, loss and injury to, or in respect of victims.[233] In 2012, the Court adopted a decision that establishes principles applicable to reparations, including relating to their scope and modalities.[234] According to its Rules of Procedure and Evidence, the Court may also appoint appropriate experts to assist it in determining the scope and extent of any damage, loss and injury to, or in respect of, victims and to suggest various options concerning the appropriate types and modalities of reparations.[235] The Court gave its first reparation judgment in 2015.[236] The Court's rulings concerning reparations may also be enforced by national courts or other relevant national authorities of a State party.[237]

64. Reparations measures, according to the decision on the principles and procedures taken by the Court in the *Dyilo* case, should be sensitive to the nature and context of the crimes that have been committed. For example, the gender- and age-specific impact that the crimes of enlisting and conscripting children under the age of 15 years and using them to participate actively in the hostilities can have on direct victims, their families and communities should be taken into account.[238] No

[229] *Sesay et al.* (footnote 223 above), para. 206; *Taylor*, Trial Judgment (footnote 226 above), para. 453.

[230] *Sesay et al*. (footnote 223 above), para. 207; *Taylor*, Trial Judgment (footnote 226 above), para. 452.

[231] International Criminal Court, *Elements of Crimes* (footnote 198 above), art. 8 (2) (b) (xvi).

[232] *Ibid.*, footnote 47.

[233] Art. 75, para. 1, of the Rome Statute.

[234] *Prosecutor v. Thomas Lubanga Dyilo*, Case No. ICC-01/04-01/06, Decision on the principles and procedures to be applied to reparations, Trial Chamber, International Criminal Court, 7 August 2012.

[235] International Criminal Court, Rules of Procedure and Evidence, *Official Records of the Assembly of States Parties to the Rome Statute of the International Criminal Court, First session, New York, 3–10 September 2002* (ICC-ASP/1/3 and Corr.1), part II.A, as amended, rule 97, para. 2.

[236] *Prosecutor v. Thomas Lubanga Dyilo*, Case No. ICC-01/04-01/06 A 2 A 3, Judgment on the appeals against the "Decision establishing the principles and procedures to be applied to reparations" of 7 August 2012 with amended order for reparations (annex A) and public annexes 1 and 2, Appeals Chamber, International Criminal Court, 3 March 2015. Three other cases are at the stage of reparations.

[237] W.A. Schabas, *The International Criminal Court: A Commentary on the Rome Statute*, 2nd ed. (Oxford, Oxford University Press, 2016), p. 362.

[238] *Dyilo*, Decision on the principles and procedures to be applied to reparations (footnote 234 above), para. 231.

reparations entailing environmental remediation have so far been ordered, but the decision on the principles and procedures would seem to allow for such measures as well. It is worth noting that the Court may award reparations on an individualized basis or, where it deems it appropriate, on a collective basis, or both.[239] The effects of environmental damage are often felt both individually and collectively.[240]

65. The decision on the principles and procedures defines "harm" as "hurt, injury and damage", which may include loss or damage to property.[241] The decision also points out, consistent with internationally recognized human rights law, that "compensation requires a broad application, to encompass all forms of damage, loss and injury, including material, physical and psychological harm".[242] Furthermore, the formulation of article 75 of the Rome Statute –"damage, loss and injury to, or in respect of, victims" – means that, while the harm must have been personal to the victim, it does not necessarily need to have been direct.[243]

66. The developing jurisprudence of the International Criminal Court will show to what extent the potential of the Rome Statute to address major environmental harm caused in conflict can be used. In this regard, it is worth noting that the Court's Office of the Prosecutor has recognized that environmental damage is a relevant consideration for the selection and prioritization of cases, stating that it will "give particular consideration to prosecuting Rome Statute crimes that are committed by means of, or that result in, *inter alia*, the destruction of the environment, the illegal exploitation of natural resources or the illegal dispossession of land".[244]

B. Corporate responsibility and liability

1. Multinational enterprises

67. The due diligence guidelines mentioned in chapter II above are among the many certification schemes and codes of conduct related to the exploitation of and trade in mineral resources.[245] They also reflect broader developments in the areas of business and human rights, most often referring to the United Nations-initiated process to address the human rights impacts of corporate action[246] and corporate social

[239] International Criminal Court, Rules of Procedure and Evidence, rule 97, para. 1. The Decision on the Principles and Procedures in *Dyilo* furthermore specifies, in para. 220, that individual and collective reparations are not mutually exclusive and may be awarded concurrently.

[240] "Environmental damage creates a multiplicity of victims: the environment itself, and the organisms that rely upon that environment, States, businesses, communities, etc.", see M. Lawry-White, "Victims of environmental harm during conflict: the potential for 'justice'", in Stahn, Iverson and Easterday, *Environmental Protection and Transitions from Conflict to Peace* (footnote 111 above), pp. 367–395, p. 370. See also footnote 430 below.

[241] *Dyilo*, Decision on the principles and procedures to be applied to reparations (footnote 234 above), paras. 228 and 230 (c).

[242] *Ibid.*, para. 229.

[243] *Ibid*., para. 228.

[244] International Criminal Court, Office of the Prosecutor, Policy paper on case selection and prioritization, 15 September 2016, para. 41.

[245] For a listing of some such standards and for a summary of transnational mineral commodity governance, see I. Espa, M. Oehl and D. Olawuyi, "Rules and practices of international law for the sustainable management of mineral commodities, including nickel, copper, bauxite and rare earths", in International Law Association, "Second report of the Committee on the Role of International Law in Sustainable Natural Resource Management for Development" (footnote 67 above), pp. 6–14, at pp. 8–9.

[246] See, e.g., Business and Human Rights Resource Centre, www.business-humanrights.org/en/business-human-rights-a-brief-introduction, as well as Institute for Human Rights and Business, www.ihrb.org/about/about-home/. For discussion, see, e.g., R. McCorquodale *et al.*, "Human rights due diligence in law and practice: good practices and challenges for business enterprises", *Business and Human Rights Journal*, vol. 2 (2017), pp. 195–224;

responsibility, which refers to initiatives taken on a multi-stakeholder basis or by the businesses among themselves.[247] Two instruments are particularly worth mentioning in this context: the Guiding Principles on Business and Human Rights[248] and the OECD Guidelines for Multinational Enterprises.[249]

68. The Guiding Principles on Business and Human Rights are based on the existing obligations of States to respect, protect and fulfil human rights and fundamental freedoms, and their implementation largely relies on State action.[250] The Guiding Principles propose a number of measures that States can take to ensure that business enterprises operating in conflict-affected areas are not involved with gross human rights abuses.[251] In this respect, it is pointed out that home States of transnational corporations have a particular role to play in assisting both such corporations and the host States.[252] As for corporations, the Guiding Principles carefully note that they have "a responsibility … to respect human rights".[253] Moreover, in situations of armed conflict, "enterprises should respect the standards of international humanitarian law".[254] Such responsibility is not understood to constitute a legal obligation but rather, as the International Law Association has pointed out, "a moral responsibility and societal expectation".[255] The Guiding Principles allude to it as "a global standard of expected conduct for all businesses wherever they operate".[256]

69. The interpretive guide to the Guiding Principles clarifies that respect for human rights is not optional for corporations. In most cases, the relevant human rights standards are contained in domestic law that binds corporations, but even if this is not the case, the responsibility to respect "exists over and above legal compliance" as a (moral) expectation.[257] Consistent with this interpretation and the need "for rights and

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T. Kirkebø and M. Langford, "The commitment curve: global regulation of business and human rights", *Business and Human Rights Journal*, vol. 3 (2017), pp. 157–185.

[247] Corporate social responsibility is a "management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders": information available at United Nations Industrial Development Organization, www.unido.org/our-focus/advancing-economic-competitiveness/competitive-trade-capacities-and-corporate-responsibility/corporate-social-responsibility-market-integration/what-csr. For discussion, see, e.g., B.D. Beal, *Corporate Social Responsibility. Definition, Core Issues, and Recent Developments* (Washington, D.C., Sage, 2014), pp.1–20. As an example of an initiative in the area of corporate social responsibility, see World Business Council for Sustainable Development, see www.wbcsd.org (last accessed on 5 February 2019).

[248] Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework (A/HRC/17/31, annex). The Human Rights Council endorsed the Guiding Principles in its resolution 17/4 of 16 June 2011.

[249] OECD, *OECD Guidelines for Multinational Enterprises* (hereinafter, "OECD Guidelines"). The updated guidelines and the related decision were adopted by the 42 Governments adhering thereto on 25 May 2011. Available at www.oecd.org/corporate/mne (last accessed on 2 December 2018).

[250] So far, 21 States have published national action plans on the implementation of the Guiding Principles, 23 are in the process of preparing such a plan or have committed to preparing one. In nine other States, either the national human rights institute or civil society has taken steps towards preparing a national action plan. Information available at www.ohchr.org/EN/Issues/Business/Pages/NationalActionPlans.aspx (last accessed on 30 January 2019).

[251] Guiding Principles on Business and Human Rights, principle 7.

[252] *Ibid*., commentary to principle 7.

[253] *Ibid.,* principle 12.

[254] *Ibid.,* commentary to principle 12.

[255] International Law Association, "Third report of the Committee on Non- State Actors" (footnote 210 above), p. 12.

[256] Guiding Principles, commentary to principle 11.

[257] Office of the United Nations High Commissioner for Human Rights (OHCHR), "The corporate responsibility to respect human rights. An interpretive guide" (New York and Geneva, 2012), p. 13.

obligations to be matched to appropriate and effective remedies when breached",[258] accountability and grievance mechanisms form the so-called third pillar of the Guiding Principles and are expected to play a central role in their implementation.[259] The responsibility for creating such mechanisms rests with States. According to principle 25, "States must take appropriate steps to ensure, through judicial, administrative, legislative or other appropriate means, that when such abuses occur within their territory and/or jurisdiction those affected have access to effective remedy".[260]

70. As a follow-up to the Guiding Principles on Business and Human Rights, the Human Rights Council established in 2011 the Working Group on the issue of human rights and transnational corporations and other business enterprises.[261] The Working Group was tasked with promoting the dissemination and implementation of the Guiding Principles, *inter alia*, by seeking and receiving "information from all relevant sources, including … rights holders", and enhancing "at national, regional and international level … access to effective remedies".[262] In this context, the Working Group was also mandated to make recommendations for enhancing access to effective remedies available "to those whose human rights are affected by corporate activities, including those in conflict areas".[263] In 2014, the Human Rights Council set up a further Working Group to elaborate a legally binding instrument on transnational corporations and other business entities.[264]

71. The human rights treaty bodies have expanded on the subject of providing effective remedies. A State's duty to protect human rights from violations by private actors is already well-established in the interpretative work of such treaty bodies and human rights special procedures, and part of that duty is providing appropriate measures to ensure the relevant rights, *inter alia*, "to prevent, punish, investigate or redress the harm caused … by private persons or entities".[265] The Committee on Economic, Social and Cultural Rights specifically addressed State obligations with regard to the activities of corporations in its 2017 general comment, in which States parties were required "to take the steps necessary to prevent human rights violations abroad by corporations domiciled in their territory and/or jurisdiction".[266]

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[258] Guiding Principles, general principles.

[259] See I. Cismas and S. Macrory, "The business and human rights regime under international law: remedy without law?", in Summers and Gough, *Non-State Actors and International Obligations* (footnote 188 above), pp. 222–259, pointing out, at p. 223, that "the business and human rights regime is premised upon the development of secondary rules on redress and accountability".

[260] Effective remedy may include apologies, restitution, rehabilitation, financial or non-financial compensation and punitive sanctions (whether criminal or administrative, such as fines), as well as the prevention of harm through, for example, injunctions or guarantees of non-repetition. The procedures for the provision of remedy should be independent and impartial but may come in different forms, judicial or non-judicial, State-based or non-State based grievance mechanisms. See the Guiding Principles, commentary to principle 25.

[261] For more information, see www.ohchr.org/en/issues/business/pages/wghrandtransnationalcorporationsandotherbusiness.aspx (last accessed on 30 January 2019).

[262] Human Rights Council resolution 17/4 of 16 June 2011, para. 6 (*b*) and (*e*).

[263] *Ibid*., para. 6 (*e*).

[264] Human Rights Council resolution 26/9 of 26 June 2014. So far the process has been inconclusive.

[265] Human Rights Committee, general comment No. 31 (2004) on the nature of the general legal obligation imposed on States parties to the Covenant, *Official Records of the General Assembly, Fifty-ninth Session, Supplement No. 40*, vol. I (A/59/40 (Vol. I)), annex III, para. 8.

[266] Committee on Economic, Social and Cultural Rights, general comment No. 24 (2017) on State obligations under the International Covenant on Economic, Social and Cultural Rights in the context of business activities (E/C.12/GC/24), para. 26. The Committee has furthermore addressed specific extraterritorial obligations of States parties concerning business activities in several of its previous general comments relating to, *inter alia*: right to health, general comment

72. In the 2017 general comment, the Committee specifies that the obligation to protect extends to violations of Covenant rights that occur outside a State's territory due to the activities of business entities, "especially in cases where the remedies available to victims before the domestic courts of the State where the harm occurs are unavailable or ineffective".[267] Extraterritorial obligations arise, according to the general comment, when a State may influence a situation located outside of its territory,[268] and require that the State take steps to prevent and redress violations of the rights provided under the Covenant resulting from activities of business entities over which it can exercise control.[269] "Particular due diligence" is required with respect to extractive industries, such as mining-related projects and oil development projects.[270]

73. The Committee further draws attention to the so-called "corporate veil", a notion that refers to how corporate groups are organized, including separate legal personalities of the parent company and its subsidiary in another country.[271] Other legal and practical barriers for holding companies responsible for activities in another country include the *forum non conveniens* doctrine, according to which a court may decline to exercise jurisdiction if another forum is available to victims,[272] as well as the difficulty of accessing information and evidence to substantiate claims, lack of legal aid and high costs of litigation abroad.[273] According to the general comment, "States parties have the duty to take necessary steps to address these challenges in order to prevent a denial of justice and ensure the right to effective remedy and reparation".[274]

74. In 2018, the Human Rights Committee issued a new general comment, on the right to life, in which it recalled the obligations of both host and home States regarding corporate action:

> States parties must take appropriate measures to protect individuals against deprivation of life by other States, international organizations and foreign corporations operating within their territory or in other areas subject to their jurisdiction. They must also take appropriate legislative and other measures to

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No. 14 (2000) on the right to the highest attainable standard of health, paras. 26 and 35; right to housing, general comment No. 4 (1991) on the right to adequate housing, para. 14; right to food, general comment No. 12 (1999) on the right to adequate food, paras. 19 and 20; right to water, general comment No. 15 (2002) on the right to water, para. 49; right to work, general comment No. 23 (2016) on the right to just and favourable conditions of work, paras. 74 and 75, as well as in its examination of State party periodic reports.

[267] General comment No. 24 (2017), para. 30.

[268] *Ibid*., para. 28.

[269] *Ibid*., para. 30. See, however, the comments submitted during the consultation process on the draft general comment, available at www.ohchr.org/EN/HRBodies/CESCR/Pages/Submissions2017.aspx (last accessed on 15 January 2019). Commenting States were notably skeptical as to the extraterritorial nature of the obligations under the Covenant.

[270] General comment No. 24 (2017), para. 32.

[271] *Ibid*., para. 42.

[272] See, e.g. D.S. Sternberg, "*Res judicata* and *forum non conveniens* in international litigation", *Cornell International Law Journal*, vol. 46 (2013), pp. 191–218.

[273] General comment No. 24 (2017), para. 43. See also E. Morgera, *Corporate Accountability in International Environmental Law* (Oxford, Oxford University Press, 2009), pp. 25–34; J. Ebbesson, "Piercing the State veil in pursuit of environmental justice", in J. Ebbesson and P. Okowa, *Environmental Law and Justice in Context* (Cambridge, Cambridge University Press, 2009), pp. 270–293.

[274] General comment No. 24 (2017), para. 44. For instance, States are urged to establish parent company or group liability regimes, to provide legal aid and other funding schemes to claimants, enable human rights-related class actions and public interest litigation, facilitate access to relevant information and the collection of evidence abroad, including witness testimony, and allow such evidence to be presented in judicial proceedings.

ensure that all activities taking place in whole or in part within their territory and in other places subject to their jurisdiction, but having a direct and reasonably foreseeable impact on the right to life of individuals outside their territory, including activities taken by corporate entities based in their territory or subject to their jurisdiction, are consistent with article 6, taking due account of related international standards of corporate responsibility, and of the right of victims to obtain an effective remedy.[275]

75. The human rights treaty bodies have also addressed the issue in their comments on the situation in individual States. The Human Rights Committee, for example, has encouraged one State party "to set out clearly the expectation that all business enterprises domiciled in its territory and/or its jurisdiction respect human rights standards in accordance with the Covenant throughout their operations" and "to take appropriate measures to strengthen the remedies provided to protect people who have been victims of activities of such business enterprises operating abroad".[276] Similarly, the Committee on the Elimination of Racial Discrimination has drawn attention to instances where the rights of indigenous peoples to land, health, environment and an adequate standard of living have been adversely affected by the operations of transnational corporations. In that context, it has encouraged the relevant State party to "ensure that no obstacles are introduced in the law that prevent the holding of … transnational corporations accountable in the State party's courts when [violations of the Covenant] are committed outside the State party.[277]

76. The Inter-American Court of Human Rights has referred to the Guiding Principles when confirming that "businesses must respect and protect human rights, as well as prevent, mitigate, and accept responsibility for the adverse human rights impacts directly linked to their activities". The Court also recalled the State obligation to "protect against human rights abuse within their territory and/or jurisdiction by third parties, including business enterprises", including by" taking appropriate steps to prevent, investigate, punish and redress such abuse through effective policies, legislation, regulations and adjudication". [278] The Special Tribunal for Lebanon has referred to the Guiding Principles as an "emerging international consensus regarding what is expected in business activity" and held that "human rights standards and the positive obligations arising therein are equally applicable to legal entities". [279] Without expressly mentioning the Guiding Principles, the International Centre for Settlement of Investment Disputes, in the *Urbaser* case, has concluded that private companies may be responsible for guaranteeing certain human rights such as the right to water.[280]

77. The OECD Guidelines for Multinational Enterprises provide non-binding principles and standards for responsible business conduct in a global context. While

[275] Human Rights Committee, general comment No. 36 (2018), para. 22. This general comment has not yet been published so citations and paragraph numbers may be subject to change in the final version.

[276] Human Rights Committee, concluding observations on the report of Germany (CCPR/C/DEU/CO/6), para. 16.

[277] Committee on the Elimination of Racial Discrimination, concluding observations on the report of the United Kingdom (CERD/C/GBR/CO/18-20), para. 29.

[278] *Kaliña and Lokono Peoples v. Suriname (Merits, reparations and costs),* Judgment, Inter-American Court of Human Rights, 25 November 2015, Series C, No. 309, para. 224. Available at www.corteidh.or.cr/docs/casos/articulos/seriec_309_ing.pdf (last accessed on 25 January 2019).

[279] *New TV S.A.L. and Karme Mohamed Tahsin al Khayat*, Case No. STL-14-05/PT/AP/ARI26-1, Decision on interlocutory appeal concerning personal jurisdiction in contempt proceedings, Special Tribunal for Lebanon, 2 October 2014, para. 46.

[280] *Urbaser S.A. and Consorcio de Aguas Bilbao Biskaia, Bilbao Biskaia Ur Partzuergoa v. Argentine Republic*, Case No. ARB/07/26, Award, International Centre for Settlement of Investment Disputes, 8 December 2016, para. 1193.

first issued in 1976, the OECD Guidelines have been updated several times, most recently in 2011, when they were aligned with the Guiding Principles. The OECD Guidelines are also based on existing legal obligations "consistent with applicable laws and internationally recognized standards".[281] Unlike the Guiding Principles,[282] the OECD Guidelines and the related documentation expressly address environmental concerns, recommending that enterprises "take due account of the need to protect the environment, public health and safety, and generally to conduct their activities in a manner contributing to the wider goal of sustainable development".[283] The chapter of the Guidelines on the environment includes more detailed guidance on international environmental standards,[284] broadly reflecting the Rio Declaration, the Aarhus Convention on Access to Information, Public Participation in Decision-making, and Access to Justice in Environmental Matters[285] and more technical standards, *inter alia*, the Standard on Environmental Management Systems of the International Organization for Standardization.[286]

78. From the point of view of accountability, the most notable feature of the OECD Guidelines is the implementation procedure based on a network of national contact points. The national contact points are, *inter alia*, tasked with handling enquiries and contributing to the resolution of issues arising from the implementation of the Guidelines in specific instances. According to a report by OECD looking at practice between 2000 and 2015, national contact points handled over 360 specific cases relating to the impact of operations of multinational enterprises. Around a quarter of those were related to the environment.[287] National contact points meet regularly to share experiences and report to the OECD Investment Committee. The Investment Committee, for its part, reports periodically to the OECD Council on matters covered by the OECD Guidelines. In these reports, the Committee may not solely rely on the information received from national contact points but is mandated to take account of a wide spectrum of views, such as those expressed by the advisory bodies, OECD Watch,[288] other international partners, and non-adhering countries, as appropriate.[289]

79. As an implementation mechanism and a mediation platform, the network of national contact points has been able to garner information on problematic situations, which has, in certain cases, led to investigation at the national level.[290] Approximately

[281] OECD Guidelines, p. 3.

[282] See, however, the 2000 United Nations Global Compact, which contained three environmental principles concerning environmentally friendly technologies, precautionary approach and "greater environmental responsibility". For the work of the Global Compact, see www.unglobalcompact.org/what-is-gc/our-work/environment (last accessed on 8 February 2019).

[283] OECD Guidelines, p. 42.

[284] *Ibid*., pp. 42–46. See also OECD, "Environment and the OECD Guidelines for Multinational Enterprises. Corporate tools and approaches". Available at https://oecd.org/env/34992954.pdf (last accessed on 4 February 2019).

[285] Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus, 25 June 1998), United Nations, *Treaty Series*, vol. 2161, No. 37770, p. 447.

[286] OECD Guidelines, p. 44.

[287] OECD, *Implementing the OECD Guidelines for Multinational Enterprises. The National Contact Points from 2000 to 2015*, p. 12. Available at https://mneguidelines.oecd.org/oecd-report-15-years-national-contact-points.pdf (last accessed on 12 February 2019).

[288] OECD Watch is a global network of civil society organizations from over 50 countries focusing on the implementation of the OECD Guidelines. See www.oecdwatch.org (last accessed on 12 February 2019).

[289] Amendment of the Decision of the Council on the OECD Guidelines for Multilateral Enterprises, section II, entitled, "The Investment Committee", para. 7. See OECD Guidelines, p. 69.

[290] For example, the United Kingdom national contact point confirmed in 2008 that the company Afrimex had breached the OECD Guidelines by purchasing minerals in the Democratic Republic of the Congo from a rebel group that had contributed to grave human rights abuses. The investigation was based on a complaint by the non-governmental organization Global Witness. See

half of the specific instances that have been accepted for further examination have resulted in agreement between the parties,[291] and the national contact points can play an active role in mediating and facilitating such agreement. In some cases, national contact points have succeeded in facilitating a direct remedy to victims for the adverse impacts of business operations, such as apology, restitution, compensation, satisfaction and guarantees of non-repetition.[292]

80. For example, in 2014, the United Kingdom national contact point concluded mediation between the World Wildlife Fund and SOCO International plc regarding the oil exploration that SOCO had conducted in Virunga National Park in the Democratic Republic of Congo. The mediation led the parties to conclude an agreement and issue a joint statement, in which SOCO committed itself to ceasing exploration in the park, unless the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the Government of the Democratic Republic of the Congo agreed that such activities are not incompatible with the Park's World Heritage status, and to not conducting "any operations in any other World Heritage site". [293] Looking at the practice during the 15 years, the above-mentioned OECD report nevertheless concludes that the national contact points have had more success when dealing with improvements to companies' communication and policies to prevent and mitigate against future harm than when seeking access to remedy for actual harm caused by corporate action.[294]

81. Alleged human rights violations committed by corporations abroad have also been addressed by national courts. The best-known example, the United States Alien Tort Statute of 1789, has served in recent decades as a platform for adjudicating serious violations of international law committed abroad.[295] The first modern case, the *Filártiga v. Peña-Irala* judgment, relating to a torture case in Paraguay, [296] confirmed that the Statute permitted claims based on contemporary customary international law of sufficient specificity. The *Kadić v. Karadzić* judgment in 1995 confirmed the applicability of the Statute to acts committed by non-State actors.[297] The *Doe v. Unocal Corp* case in 2003, relating to human rights abuses in oil and gas extraction operations in Myanmar, was the first to deal specifically with a multinational corporation.[298] Since then, more than 150 claims concerning violations by corporations have been filed with the courts of the United States on the basis of

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the "Final statement of the United Kingdom national contact point for the OECD Guidelines for Multinational Enterprises: Afrimex (UK) Ltd.". Available at www.oecd.org/investment/mne/43750590.pdf (last accessed 12 February 2019).

[291] OECD, *Implementing the OECD Guidelines for Multinational Enterprises* (footnote 287 above), p. 12.

[292] *Ibid.*, p. 44.

[293] "Final statement of the United Kingdom national contact point following agreement reached in complaint from WWF International against SOCO International plc", July 2014. Available from www.gov.uk/government/publications/uk-ncp-final-statement-wwf-international-and-soco-international-plc-agreement-reached (last accessed on 15 February 2019). For other successful cases, see OECD, *Implementing the OECD Guidelines for Multinational Enterprises* (footnote 287 above), pp. 42–45.

[294] OECD, *Implementing the OECD Guidelines for Multinational Enterprises* (footnote 287 above), pp. 42–44.

[295] Also known as "ATCA" (Alien Tort Claims Act), providing that "[t]he district courts shall have original jurisdiction of any civil action by an alien for a tort only, committed in violation of the law of nations or a treaty of the United States", 28 U.S.C.§1350 (2006) (last accessed on 12 February 2019).

[296] United States Court of Appeals for the Second Circuit, *Filártiga v. Peña-Irala*, 630 F.2d 876 (30 June 1980).

[297] *Kadić v. Karadzić*, 70 F. 3d 232, 240 (2d Cir. 1995). See also C.F. Marshall, "Re-framing the Alien Tort Act after Kadic v. Karadxic" [sic.], *North Carolina Journal of International Law and Commercial Regulation*, vol. 21 (1996), pp. 590–620.

[298] *Doe v. Unocal Corp.,* 27 F. Supp. 2d 1174 (C.D. Cal. 1998).

Alien Tort Statute,[299] although many fewer actually led to an outcome favourable to the claimant.[300]

82. The United States Supreme Court has clarified the jurisdictional scope of the Alien Tort Statute in the *Sosa v. Alvarez-Machain* and *Kiobel* cases. In *Sosa*, the Court held that, given the different nature of present-day international law from that of the "law of nations" in 1789, which only recognized a few torts, such as piracy, a contemporary claim could be based on Alien Tort Statute only if it rests on an international law norm that is defined with a sufficient specificity "comparable to the features of the 18th-century paradigms". [301] In *Kiobel*, the Court effectively limited the scope of the Statute by concluding that the general presumption against extraterritorial application of national law applies to the Act.[302] Previously, and in the case that was under the Court's consideration, claims had been filed under the Statute concerning situations in which both the petitioners and the respondents were foreigners and the events to which the claims related had taken place abroad.

83. The *Kiobel* case concerned events in Ogoniland, Nigeria, which have been subject to several cases of litigation in different countries.[303] The plaintiffs were Nigerians resident in the United States, alleging that the multinational company Shell, having corporate presence in the United States, was involved in serious human rights violations in Nigeria. For the presumption of extraterritoriality to be displaced, the Supreme Court stated that the link to the United States should be sufficiently strong, which was not shown in the case at hand.[304]

84. Some of the claims filed with United States courts under Alien Tort Statute before *Kiobel*, for instance the *Wiwa v. Royal Dutch Petroleum Company*,[305] the *Doe v. Unocal*[306] and the *Saldana v. Occidental Petroleum Corp*. cases,[307] were related to environmental damage allegedly resulting from business activities. The claims in the *Wiwa* case concerned the hanging of the activist Ken Saro-Wiwa and atrocities committed in Nigeria against other persons, but it had as its background the severe damage to the local environment and economy resulting from oil drilling in the Ogoni

[299] See, e. g. *Sarei. v. Rio Tinto plc,* 550 F.3d 822, 824 (9th Cir. 2008); *Khulumani v. Barclay National Bank Ltd*., 504 F.3d 254 (2d Cir. 2007); *Aldana v. DelMonte Fresh Produce Inc*., United States Court of Appeals, Eleventh Circuit, No.12-15143, 6 February 2014.

[300] N. Jägers, K. Jesse and J. Verschuuren, "The future of corporate liability for extraterritorial human rights abuses: the Dutch case against Shell", *AJIL Unbound*, vol. 107 (2013), pp. 36–41, p. 37. Available from www.cambridge.org/core/journals/american-journal-of-international-law/ajil-unbound.

[301] *Sosa v. Alvarez-Machain*, 542 U. S. (2004), p. 725.

[302] *Esther Kiobel, et al. v. Royal Dutch Petroleum Co., et al*., 133 S.Ct. 1659 (2013).

[303] *Social and Economic Rights Action Center (SERAC) and Center for Economic and Social Rights (CESR) v. Federal Republic of Nigeria*, Communication No. 155/96, Decision, African Commission on Human and Peoples' Rights, 27 May 2002; Federal High Court of Nigeria Benin Judicial Division, *Between Mr Jonah Ghemre and Shell Petroleum Development Company Nigeria Ltd., Nigerian National Petroleum Corporation*, Attorney General of the Federation (Case No. FHC/B/CS/53/05), 14 November 2005; *Socio-Economic Rights and Accountability Project (SERAP) v. Nigeria*, Judgment No. ECW/CCJ/JUD/18/12, Community Court of Justice, Economic Community of West African States, 14 December 2012; *Wiwa v. Royal Dutch Petroleum Co.*, 96 Civ. 8386(KMW), 2002 U.S. Dist. LEXIS 3293 (S.D.N.Y. Feb. 22, 2002; *Akpan v. Royal Dutch Shell plc*, The Hague District Court, Case No. C/09/337050/HA ZA 09-1580 (ECLI:NL:RBDHA:2013:BY9854), 30 January 2013.

[304] Even where claims concern and touch the territory of the United States, they must do so with "sufficient force". See *Kiobel* (footnote 302 above), p. 1669.

[305] *Wiwa v. Royal Dutch Petroleum Co*., 96 Civ. 8386(KMW), 2002 U.S. Dist. LEXIS 3293 (S.D.N.Y. Feb. 22, 2002).

[306] *Doe v. Unocal Corp.*, 27 F. Supp. 2d 1174 (C.D. Cal. 1998).

[307] *Saldana v. Occidental Petroleum Corp.,* 774 F.3d 544 (9th Cir. 2014).

region.[308] The Court determined that the "defendants were 'willful participant[s]' in joint action with the State and its agents" and could therefore be treated as State actors for the purposes of Alien Tort Statute.[309] The *Unocal* case, too, concerned serious international crimes such as torture, murder and slavery but was closely related to oil and gas extraction operations and the construction of a natural gas pipeline project in Myanmar. The court in that case found that Unocal had knowledge of the human rights violations before entering into a partnership with the Government, which was sufficient for liability under the Alien Tort Statute. *Saldana* was concerned with the murder of three union leaders by the Colombian military in Arauca, where they and the social and trade organizations to which they belonged had protested against the environmental destruction caused by a pipeline and a plan to drill for oil on or near lands belonging to the U'wa indigenous people.[310]

85. Some of the early environmental claims, such as in *Beanal v. Freeport McMoRan* in which the mining company was accused of involvement in genocide, other human rights violations and environmental torts in Indonesia, were dismissed because of the conclusion that no international environmental norms would meet the requirement that the alleged violation must be "definable, obligating (rather than hortatory) and universally condemned".[311] The court in *Beanal* discussed the polluter pays principle, the precautionary principle, the proximity principle, and the principle of good neighbourliness, as well as the principle of prevention incorporated in principle 21 of the Stockholm Declaration and principle 2 of the Rio Declaration, but concluded that they were not "sufficiently substantive" at the time "to be capable of establishing the basis of an international cause of action".[312] The same argument was also used, for example, in the *Amlon Metals, Inc. v. FMC Corp.* and the *Aguinda v. Texaco* cases.[313]

86. Finally, the *Sarei v. Rio Tinto plc*. case[314] was related to Rio Tinto's mining operations in Bougainville, Papua New Guinea. The case raised new questions of international environmental law, including environmental rights (the right to life and the right to health), sustainable development and the United Nations Convention on the Law of the Sea.[315] The district court in the case acknowledged that the United

[308] See United Nations Environment Programme, *Environmental Assessment of Ogoniland* (Nairobi, 2011). Available at https://postconflict.unep.ch/publications/OEA/UNEP_OEA.pdf (last accessed on 2 February 2019).

[309] *Wiwa v. Royal Dutch Petroleum Co.* (footnote 305 above), p. 40. Under the Alien Tort Statute, State action is required for the claim to be admissible if it concerns a norm of international law that is only binding on States, such as torture.

[310] The *Saldana* case was dismissed on the basis of the political question doctrine.

[311] *Beanal v. Freeport McMoRan, Inc*. 969 F. Supp. 362 (E.D.La.1997), p. 370. For a more comprehensive overview of the relevant cases see N.L. Bridgeman, "Human rights litigation under the ATCA as a proxy for environmental claims", *Yale Human Rights and Development Law Journal*, vol. 6 (2003), pp. 1–44.

[312] See, however, P. Sands, *Principles of International Environmental Law* (Manchester, Manchester University Press, 1995), p. 184, holding that the principle of prevention and that of cooperation (good neighbourliness) would provide a basis for an international cause of action. See also P. Sands *et al.*, *Principles of International Environmental Law*, 4th ed. (Cambridge, Cambridge University Press, 2018), p. 198, adding the precautionary principle in the European context, and perhaps also more globally in respect of particular activities or subject areas.

[313] *Amlon*, 775 F.Supp., at p. 671, the court considered a number of sources such as the Stockholm Declaration, principle 21, in the light of United States legislation and practice in search for customary international environmental law but found that it lacked binding force. Similarly, *Aguinda v. Texaco Inc.,* 1994 U.S. Dist. LEXIS 4718 (S.D.N.Y., April 11, 1994, regarding large-scale contamination and destruction of tropical rain forests, and harm to indigenous peoples, in Ecuador. Ultimately the case was dismissed for procedural reasons such as *forum non conveniens* and comity.

[314] *Sarei v. Rio Tinto plc*., 221 F. Supp. 2d 1116 (C.D. Cal. 2002), 9 July 2002.

[315] United Nations Convention on the Law of the Sea (Montego Bay, 10 December 1982), United Nations, *Treaty Series* vol. 1833, No. 31363, p. 3.

Nations Convention on the Law of the Sea reflected customary international law and could provide a cause of action if the plaintiffs' allegations of widespread pollution of a bay and the ocean were true.[316] Finally, however, the case was dismissed on the basis of the political question doctrine.[317] Five years later, the Court of Appeal overturned the district court's dismissal. In its ruling of 2011,[318] the Court of Appeal held that the Alien Tort Statute was created to provide jurisdiction for certain violations of international law occurring outside the United States[319] and therefore applied to the conduct in Papua New Guinea. The Court further stated that the Statute did not exclude corporate liability,[320] and concluded that the alleged claims concerning genocide, war crimes, crimes against humanity and racial discrimination related to violations of sufficiently established international norms of "*universal concern*".[321] In 2013, however, the Supreme Court vacated the Court of Appeals ruling and ordered the Court of Appeals to reconsider the case in the light of the *Kiobel* decision.[322]

87. While the Supreme Court in *Kiobel* looked at the question of extraterritoriality primarily from the point of view of the purpose and nature of the Alien Tort Statute,[323] issues of extraterritorial civil jurisdiction and corporate liability under international law were raised in the *amicus curiae* briefs. The European Commission reflected in its brief on the limits of extraterritorial civil jurisdiction, arguing that the exercise of universal (civil) jurisdiction "to reach conduct and parties with no nexus to the United States" could fall under the established bases of jurisdiction under international law "but only when the conduct at issue could also give rise to universal *criminal* jurisdiction"[324] on the basis of "the sheer reprehensibility of certain crimes of 'universal concern'".[325] This requires that the tort in question must rise to the level of the most serious international crimes and that the local remedies must have been exhausted or the local forum be unwilling or unable to provide relief.[326] The United Kingdom and the Netherlands, in support of the respondents, argued generally against "broad assertions of extraterritorial civil jurisdiction",[327] but also elaborated on the issue of corporate liability. Their brief forcefully denied that contemporary international law would provide for corporate liability.[328] "While in certain circumstances", it argued, "specific obligations may require States to regulate corporations in a particular way, this cannot be evidence that international law imposes liabilities on corporations".[329] The decision whether and how to regulate corporate activity within its territory or under its jurisdiction was therefore left for each individual State to decide.[330]

[316] *Sarei* 2002 (footnote 314 above), p. 1162.
[317] *Ibid*., pp. 1208–1209.
[318] *Sarei v. Rio Tinto*, United States Court of Appeals for the Ninth Circuit, Case No. 02-56256.
[319] *Ibid*., pp. 19338 and 19339.
[320] *Ibid*., pp. 19340 and 19341.
[321] *Ibid*., pp. 19358–19380 (emphasis added).
[322] On 28 June 2013 the Court of Appeals upheld the dismissal of the case, citing the Supreme Court's reasoning against the extraterritorial application of the Alien Tort Statute. The Order is available at http://cdn.ca9.uscourts.gov/datastore/opinions/2013/06/28/02-56256web.pdf.
[323] D.P. Stewart, "*Kiobel v. Royal Dutch Petroleum Co*.: the Supreme Court and the Alien Tort Statute", *American Journal of International Law*, vol. 107 (2013), pp. 601–621.
[324] Brief of the European Commission on behalf of the European Union as *Amicus Curiae* in Support of Neither Party, June 13, 2012, p. 3, at p. 4, emphasis in the original.
[325] *Ibid*., p. 13.
[326] *Ibid.*, p. 26.
[327] Brief of the Governments of the United Kingdom of Great Britain and Northern Ireland and the Kingdom of the Netherlands as *Amici Curiae* in support of the respondents, p. 2.
[328] *Ibid.*, p. 6.
[329] *Ibid*., p. 24.
[330] *Ibid.*, p. 28.

88. Furthermore, in relation to jurisdictional barriers to corporate liability, the courts in the United States have developed an elaborate doctrine on the criteria that may, under exceptional circumstances, justify "piercing the corporate veil". The district court in the *Bowoto v. Chevron* case, which was related to the Chevron-Texaco Corporation's alleged involvement in human rights abuses in Nigeria,[331] held that piercing the veil would be possible if it was shown "that the separate identity of the corporation has not been respected and that respecting the corporate form would do injustice on the litigants".[332] The court relied on a theory, according to which a parent company can be held liable for acts of a subsidiary corporation if there is an agency relationship between the parent and the subsidiary.[333] In the case at hand, the district court paid particular attention to: (*a*) the degree and content of the communication between the parent and the subsidiary; (*b*) the degree to which the parent set or participated in setting policy, particularly security policy, for the subsidiary; (*c*) the officers and directors whom the parent and the subsidiary had in common; (*d*) the reliance on the subsidiary for revenue production and its importance in the overall success of the parent's operations; and (*e*) the extent to which the subsidiary, if acting as the agent of the defendants, was acting within the scope of its authority.[334]

89. In another case, in which South African plaintiffs sued Daimler AG and Barclays National Bank Ltd. for aiding and abetting the Government of South Africa to pursue apartheid policy,[335] a district court in New York stated that one corporation may be held legally accountable for the actions of the other if the corporate relationship between a parent and its subsidiary is sufficiently close.[336] "A parent company and its subsidiary lose their distinct corporate identities when their conduct demonstrates a virtual abandonment of separateness."[337] Relevant factors in determining whether this was the case included disregard of corporate formalities, intermingling of funds and overlap of ownership, officers, directors and personnel.[338]

90. National case law on corporate wrongdoing abroad is also available from Europe, both from common law and civil law jurisdictions.[339] The relevant claims have been filed with domestic courts, but doing so has been facilitated by a regional legal framework based on two European Union regulations that provide uniform rules for all Member States, as well as Iceland, Norway and Switzerland. First, according to the Brussels I Regulation, national courts within the European Union have jurisdiction over all legal and natural persons domiciled in their jurisdiction.[340] This

[331] *Bowoto v. Chevron Texaco Corp*., 312 F.Supp.2d 1229(2004).
[332] *Ibid*., p. 1237. This conclusion was based on a substantive number of domestic court cases.
[333] *Ibid*., p. 1238.
[334] *Ibid*., p. 1243
[335] *In re South African Apartheid Litigation*, 617 F. Supp.2d 228 (S.D.N.Y. 2009).
[336] *Ibid*., p. 246.
[337] *Ibid*., p. 250.
[338] *Ibid.*, p. 251.
[339] *Motto v. Trafigura Ltd*. [2012] W.L.R.657 (Eng.); *Chandler v. Cape plc*, [2012] EWCA (Civ) 525 (Eng.); *Arroyo v. BP Petroleum Co. (Colom.) Ltd.*, Particulars of Claim, No. HQ08X00328 (High Court of Justice) (Eng.); *Guerrero v. Monterrico Metals plc*, [2009] EWHC 2475 (QB) (Eng.); *Trafigura Beheer* BV, Gerechtshof Amsterdam, Dec. 23, 2011, Case No. 23-003334-10 (ECLI:NL:GHAMS:2011:BU9239); *Lipietz v. Préfet de la Haute-Garonne*, No. 305966, Bordeaux State Council, 21 December 2007; *Lubbe and others v. Cape plc Afrika and others v. Same*, 20 July 2000, 1 Lloyd's rep. 139. Ongoing cases include *Global Witness et al. v. Dalhoff, Larsen and Horneman* in Montpellier Appeals Court, which ordered the continuation of the investigation proceedings for concealment of Liberian timber by Dalhoff, Larsen and Horneman on 22 March 2018, see www.asso-sherpa.org (last accessed on 1 February 2019); *Arica Victims KB v. Boliden Mineral AB* concerning the transport and dumping of smelter sludge in the vicinity of the Chilean town Arica by a local contractor of the Swedish company Boliden Mineral AB.
[340] Council Regulation (EC) No. 44/2001 of 22 December 2000 on jurisdiction and the recognition and enforcement of judgments in civil and commercial matters (Brussels I Regulation), art. 2,

regime notably removes, with limited exceptions, the *forum non conveniens* argument.[341] Second, the Rome II Regulation provides that the law applicable to a claim shall be that of the State in which the damage occurred,[342] thus removing the issue of extraterritorial application of national law. Several States bound by this regime have jurisdictional rules allowing civil courts to assume jurisdiction in exceptional circumstances on a "necessity basis" where the claimant has no other forum available and the State has a sufficient nexus to the dispute in order to protect against a denial of justice.[343]

91. Some of the cases cited have also addressed the issue of the relationship between a parent company and a subsidiary. The *Lubbe* case of the Court of Appeal of England and Wales, while dealing primarily with jurisdictional issues, acknowledges that a parent company that is proved to exercise *de facto* control over the operations of a foreign subsidiary, and that knows that those operations involve risks to the health of the workers or other persons, owes a duty of care to such persons.[344] In the *Chandler v. Cape* case, the same Court similarly concluded that, in appropriate circumstances, the parent company may have a duty of care in relation to the health and safety of the employees of its subsidiary. That could be the case, for example, when the business of the parent and the subsidiary are in a relevant aspect the same, and when the parent has, or ought to have, superior knowledge of the relevant aspects of health and safety in the particular industry and of the shortcomings in the subsidiary's system of work, and the parent knew or ought to have known that the subsidiary or its employees relied on it for protection.[345] Similarly, in *Akpan v. Royal Dutch Shell*, the District Court of The Hague concluded that the Nigerian subsidiary of Shell had breached its duty of care by being negligent and that the parent company, too, may have had a duty of care.[346]

92. The jurisprudence under the Alien Tort Statute, in particular, proves that corporations have been seen as capable of co-perpetrating or aiding and abetting genocide, crimes against humanity and war crimes, and thus being bound by at least the most fundamental rules of international criminal law.[347] In general, however, the

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para. 1, *Official Journal of the European Communities*, L 12, p. 1. The domicile of a corporation is defined as the location of its statutory seat, central administration or principal place of business.

[341] On 1 March 2005, the European Court of Justice in *Owusu v. Jackson* held that the English doctrine of *forum non conveniens* was inconsistent with the Brussels Convention (the Convention) when a defendant was domiciled in the United Kingdom, even if the natural forum was in a non-Contracting State. *Owusu v. Jackson*, Judgment, European Court of Justice, 1 March 2005. See G. Guniberti, "*Forum non conveniens* and the Brussels Convention", *International and Comparative Law Quarterly*, vol. 54 (2005), pp. 973-982, p. 973.

[342] Regulation (EC) No. 864/2007 of the European Parliament and of the Council of 11 July on the law applicable to non-contractual obligations (Rome II Regulation), *Official Journal of the European Union*, L 199, p. 40, art. 4, para. 1. See also Convention on Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters (Lugano, 30 October 2007), *Official Journal of the European Union*, L 339, p. 3.

[343] Brief of the European Commission (footnote 324 above), p. 24.

[344] *Lubbe* (footnote 339 above). See also P. Muchlinski, "Corporations in international litigation: problems of jurisdiction and United Kingdom *Asbestos* cases", *International and Comparative Law Quarterly*, vol. 50 (2001), pp. 1–25.

[345] *Chandler v. Cape* (footnote 339 above), para. 80. See also R. McCorquodale, "Waving not drowning: *Kiobel* outside the United States", *American Journal of International Law*, vol. 107 (2013), pp. 846–851.

[346] *Akpan v. Shell* (footnote 303 above), para. 4.29. The Court did not, however, hold the parent company responsible.

[347] This claim gets support, *inter alia*, from the post-Second World War jurisprudence such as the *Industrialists* Trial of the United States Military Tribunal at Nuremberg, in particular the *Farben* and *Krupp* cases. *Law Reports of Trials of War Criminals*, vol. X, *The* I.G. Farben *and* Krupp *Trials* (United Nations War Crimes Commission, His Majesty's Stationery Office, London, 1949).

status of business entities under international law remains disputed.[348] Legally binding obligations can be imposed on corporations in the domestic law of the State in which they are domiciled[349] or in which they conduct their operations. In the event of an infringement, both States may have jurisdiction. It can be argued that the host State, as *forum delicti*, should have the primary role, as in fact was decided in the *Bhopal* case.[350] In situations of armed conflict, however, or in the aftermath of a conflict, the host State may not be in the position to effectively enforce its legislation.[351] For example, in the *Katanga Mining* case,[352] an English commercial court tried a case concerning a dispute related to events in the Democratic Republic of the Congo. This was not an obvious choice, since the company Katanga was incorporated in Bermuda, resident in Canada for tax purposes[353] and had all its actual business operations in the Democratic Republic of the Congo.[354] The parties had furthermore agreed in a previous contract that any disputes would be settled in the Court of Great Instance of Kolwezi (Democratic Republic of the Congo). The English court nevertheless decided, in view of a situation in which "attempted interference with the integrity of justice" was "apparently widespread and endemic",[355] that the Democratic Republic of the Congo would not be "a forum in which the case may be tried suitably for the interests of all the parties and for the ends of justice".[356] Where this is the case, as it frequently is in conflict zones and post-conflict situations, the home State of a multinational enterprise has a particularly important role in providing effective remedy for alleged wrongdoings.[357]

2. Private military and security companies

93. Private contractors have become a standard feature in current armed conflicts and in post-conflict situations.[358] Private military and security companies provide services that have traditionally been provided by the military or other public

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[348] See International Law Association, "Final Report of the Committee on Non- State Actors", para. 80.

[349] In general, meaning the State where a corporation is registered, has its seat or the principal centre of activity.

[350] In that case, the United States courts had concluded that India was the proper forum for the hearing of the claims of the Indian victims on the grounds, *inter alia*, that India had the stronger regulatory interest in dealing with the litigation. See *In re Union Carbide Corporation Gas Plant Disaster at Bhopal India in December 1984*, 634 F.Supp.842 (SDNY 1986), affirmed in appeal 809 F.2 d. 195 (2nd Cir. 1987).

[351] Similarly, in the United States case of *In re Xe Services*, the District Court dismissed the private military company's claim that Iraq would be an appropriate forum and held that it was not shown that an alternative forum existed. See *In re XE Services Alien Tort Litigation*, 665 F Supp 2d 569 (ED Va 2009).

[352] *Alberta Inc. v. Katanga Mining Ltd*. [2008] EWHC 2679 (Comm), 5 November 2008 (Tomlinson J.)

[353] *Ibid.*, para. 19.

[354] *Ibid.*, para. 20.

[355] *Ibid.*, para. 34.

[356] *Ibid.*, para. 33.

[357] See Committee on Economic, Social and Cultural Rights, general comment No. 24 (2017), para. 30.

[358] Since the early 1990s, many traditional public security functions have been contracted out to private military and security companies – an industry which is estimated to be worth US$244 billion per year. See United Nations Office on Drugs and Crime, *State Regulation concerning Civilian Private Security Services and their Contribution to Crime Prevention and Community Safety* (New York, 2014), p. 2. Available at www.unodc.org/documents/justice-and-prison-reform/crimeprevention/Ebook0.pdf. See also "Global private security services market worth $244 billion by 2016 says new research report at ReportsnReports.com", available at www.prweb.com/releases/global-securityservices/market-analysis-2016/prweb10387295.htm (last accessed on 5 February 2019). See also L. Cameron and V. Chetail, *Privatizing War. Private Military and Security Companies under Public International Law* (Cambridge, Cambridge University Press, 2013).

authorities of a State, such as logistic support, intelligence services, training of troops, protection of personnel and military assets, and protection of commercial shipping from piracy.[359] In addition to States, international organizations in the context of peace operations, private corporations in the area of extractive industries and humanitarian organizations, for example, commonly use services of private military and security companies.[360] In transitional phases and post-conflict situations, private contractors may be involved in various kinds of reconstruction work, including the disposal of military waste and conflict debris.[361] It is in this context that the question of the responsibility of a private military company for environmental harm has first manifested.[362]

94. As business enterprises, private military companies are expected to respect human rights in accordance with the Guiding Principles on Business and Human Rights.[363] The State in which such a company is domiciled bears certain obligations with regard to ensuring that this is the case.[364] Like other companies with transnational activities, private military and security service providers are also subject to the legislation of the country in which they operate. Many of the general considerations presented above are thus relevant to private military companies. Their particular area of operations and presence in conflict zones nevertheless distinguishes private military companies as being a category of business entities in need of specific regulation.

95. In the past 15 years, there have been numerous initiatives to regulate private military and security companies at the international level. These include proposals for an international convention,[365] the 2008 Montreux Document of ICRC, which can be described as a restatement of law and a collection of best practices,[366] and a number

[359] C. Lehnhardt, "Private military contractors", in. A. Nollkaemper and I. Plakokefalos (eds.), *The Practice of Shared Responsibility in International Law* (Cambridge, Cambridge University Press, 2017), pp. 761–780.

[360] See L. Cameron, "Private military companies: their status under international humanitarian law and its impact on their regulation", *International Review of the Red Cross*, vol. 88 (2006), pp. 573–598, p. 575–577.

[361] O. Das and A. Kellay, "Private security companies and other private security providers (PSCs) and environmental protection in *jus post bellum*: policy and regulatory challenges", in Stahn, Iverson and Easterday (eds.), *Environmental Protection and Transitions from Conflict to Peace* (footnote 111 above), pp. 299–325.

[362] See *re: KBR, Inc., Burn Pit Litigation, Metzgar v. KRB, Inc.*, 4th Cir., No. 17cv-1960, 20 June 2018.

[363] According to the Guiding Principles on Business and Human Rights, principle 14, "[t]he responsibility of business enterprises to respect human rights applies to all enterprises regardless of their size, sector, operational context, ownership and structure".

[364] See, e.g., F. Francioni, "The role of the home State in ensuring compliance with human rights by private military contractors", in F. Francioni and N. Ronzitti (ed.), *War by Contract. Human Rights, Humanitarian Law and Private Contractors* (Oxford, Oxford University Press, 2011), pp. 93–110.

[365] Draft of a possible Convention on Private Military and Security Companies (PMSCs) for consideration and action by the Human Rights Council, Report of the Working Group on the use of mercenaries as a means of violating human rights and impeding the exercise of the right of peoples to self-determination (A/HRC/15/25), annex. See also European Parliament, Committee on Foreign Affairs, Draft report on human rights concerns in private military and security companies' operations affecting third countries, 2018/2154(INI), 17 July 2018, available at www.europarl.europa.eu/sides/getDoc.do?type=COMPARL& reference=PE-623.955&format=PDF&language=EN&secondRef=01 (last accessed on 7 January 2019).

[366] "Montreux Document on pertinent legal obligations and good practices for States related to operations of private military and security companies during armed conflict" (Montreux, ICRC, 2008). Fifty-four States support the Montreux Document, and the European Union endorsed it on 27 July 2012.

of codes of conduct prepared together with or by the industry itself.[367] The question of the responsibility and accountability of private contractors is addressed in different ways. The Montreux Document recalls the grave breaches regime of the Geneva Conventions, which requires of all States that they have in place appropriate legislation and capacity to investigate and prosecute grave breaches.[368] The human rights obligations of the home State of private military and security companies are also highlighted; for example, the obligation of "adopting such legislative and other measures that may be necessary to give effect to [human rights] obligations". In specific circumstances, home States have an obligation "to prevent, investigate and provide effective remedies for relevant misconduct of [private military and security companies] and their personnel".[369] The principal sanction for misconduct under the International Code of Conduct for Private Security Providers is suspension or termination of membership in the case of non-compliance with the Code.[370] The 2009 Kampala Convention of the African Union, however, requires States parties to "[e]nsure the accountability of non-State actors concerned, including multinational enterprises and private military or security companies, for acts of arbitrary displacement or complicity in such acts".[371]

96. The most prominent aspects distinguishing private military and security companies from other business enterprises, apart from the nature of their services, are related to their relationship with States. First, depending on the role and functions of private military and security companies in a situation of armed conflict, their staff members may be legally bound by the law of armed conflict.[372] In the case where such persons take part in combat operations or otherwise form part of the armed forces of a State, they fall under article 91 of Additional Protocol I to the Geneva Conventions,[373] triggering the contracting State's responsibility for all their acts. In some situations, private contractors may also exercise elements of governmental authority, thus engaging the responsibility of the contracting State.[374] Second, even

[367] Such as the "Legislative guidance tool for States to regulate private military and security companies" and "A contract guidance tool for private military and security services", prepared by the Geneva Centre for the Democratic Control of Armed Forces (DCAF) to support the implementation of the Montreux Document (Federal Department of Foreign Affairs of Switzerland and DCAF, Geneva, 2016; available at www.dcaf.ch/sites/default/files/publications/documents/Legislative-Guidance-Tool-EN_1.pdf and www.ppps.dcaf.ch/sites/default/files/uploads/Contract%20Guidance%20Tool_FINAL_WEB_0.pdf); the International Code of Conduct for Private Security Providers (available from https://icoca.ch/sites/all/themes/icoca/assets/icoc_english3.pdf), established by the International Code of Conduct Association, an industry-owned self-regulation mechanism with voluntary standards, and the International Stability Operations Association Code of Conduct (available from https://stability-operations.org/page/CodeofConduct_131), which is an industry-owned self-regulation mechanism.

[368] Montreux Document, paras. 5, 11, 16 and 20.

[369] *Ibid*., para. 15.

[370] International Code of Conduct Association, "Procedures, Article 13: Receiving and processing complaints", sect. IX entitled, "Sanction for failure to cooperate in good faith or take corrective action", p. 7. Available at https://icoca.ch/sites/default/files/uploads/ICoCA-Procedures-Article-13-Complaints.pdf (last accessed on 31 January 2019).

[371] African Union Convention for the Protection and Assistance of Internally Displaced Persons in Africa, art. 3.

[372] According to ICRC, "[t]he status of the personnel of [private military and security companies] in an armed conflict is determined by international humanitarian law, on a case-by-case basis, in particular according to the nature and circumstances of the functions in which they are involved". ICRC, "International humanitarian law and private military/security companies: FAQ", 10 December 2013. Available at www.icrc.org/en/document/ihl-and-private-military-security-companies-faq (last accessed on 15 January 2019).

[373] And art. 3 of the Hague Convention IV, see para. 105 below.

[374] Art. 5 of the articles on State responsibility and commentary thereto, *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at pp. 42–43. For pertinent examples, see Francioni, "The role of the home State in ensuring compliance with human rights by private military contractors" (footnote 364 above), pp. 100–102.

when this is not the case, the proximity of private contractors to the contracting State may complicate efforts to hold them accountable for violations of applicable law. Third, there may be several States in the position to exercise legal control over the private military and security company's activities and, where necessary, to ensure its accountability: the host State where the private military and security company operates, the State that has contracted with the private military and security company and the company's home State.

97. In a situation of an armed conflict or institutional instability, the host State may often not be in the position to monitor foreign private military and security companies operating in their territory.[375] Even where the territorial State has contracted with the private military and security company, it may not be realistic to "rely on the effective control of private military and security companies by the host state, whose inability or incapacity to provide security and governance is the *raison d'être* of the resort to private contractors".[376] When working for another State, private contractors may furthermore be covered by immunity in the territorial State. For instance, Order No. 17 of the Coalition Provisional Authority granted immunity to foreign contractors during the occupation of Iraq.[377]

98. The contracting State, whether the private contractor's home State or not, is in the position to set conditions and specific requirements concerning the private military and security company's services and the way in which they are performed. The procurement contract may contain human rights, environmental or other standards that are binding on the contractor and may lead to contract litigation in the case of breach.[378] In the United States, the Military Extraterritorial Jurisdiction Act permits extraterritorial jurisdiction over civilian contractors working for the Department of Defense or contracted by other United States federal agencies "to the extent that their employment is related to the support of the [Department of Defense] mission overseas".[379]

99. The home State may nevertheless often be best placed to guarantee that private military and security companies comply with international standards. The home State's obligation to respect, protect and ensure human rights can be construed as entailing an obligation to take appropriate legislative or other measures to regulate private security providers so as to prevent violations of the relevant rights and provide for appropriate remedial processes.[380] The role of the home State is particularly pronounced also when the contractor is not a State actor. The United Nations has adopted rules on the use of private military or security companies,[381] but that may not

[375] Das and Kellay, "Private security companies and other private security providers (PSCs) and environmental protection in *jus post bellum*" (footnote 361 above), p. 309.

[376] Francioni, "The role of the home State in ensuring compliance with human rights by private military contractors" (footnote 364 above), p. 95.

[377] Coalition Provisional Authority Order No. 17 on the status of the Coalition, foreign liaison missions, their personnel and contractors, Section 3, "Contractors". Available at www.usace.army.mil/Portals/2/docs/COALITION_PROVISIONAL.pdf (last accessed on 2 February 2019).

[378] See, e.g., Montreux Document, paras. 14–16.

[379] Military Extraterritorial Jurisdiction Act, Section 3261 on criminal offences committed by certain members of the Armed Forces and by persons employed by or accompanying the Armed Forces outside the United States. Available at https://www.justice.gov/criminal-hrsp/meja (last accessed on 10 January 2019).

[380] Montreux Document, para. 15. See also Human Rights Committee, general comment No. 31 (2004), para. 8.

[381] United Nations, Department of Safety and Security, *United Nations Security Management System: Security Policy Manual*, chap. IV, sect. I: Armed Private Security Companies. Available at www.un.org/undss/sites/www.un.org.undss/files/docs/security_policy_manual_spm_e-book_as_of_29_nov_2017_0.pdf (last accessed on 10 February 2019).

be the case with all contracting entities. Several States have adopted legislation on supervision and oversight of private military and security companies, including licensing and monitoring frameworks; for example, the Federal Department of Foreign Affairs of Switzerland and Geneva Centre for the Democratic Control of Armed Forces legislative guidance tool of 2016.[382] That tool nevertheless points out that most national laws still fail to adequately ensure that legislation extends to private military and security companies registered or incorporated in the country but operating abroad.[383]

100. A number of national court cases have been raised in recent years concerning alleged wrongdoings by private military and security companies. In the United States, a contractor working for the country's Central Intelligence Agency (CIA) in Afghanistan was prosecuted under the USA PATRIOT Act.[384] Most of the cases in the United States have nevertheless been filed against companies. These cases show that, even where there is a legislative basis for the establishment of accountability, the proximity of private contractors to State policy complicates the matter. For example, the immunity for combatant activities under the Federal Tort Claims Act was extended to contractors in two cases dealing with alleged mistreatment of prisoners in the Abu Ghraib detention facility.[385] Several other cases against private military and security companies have been dismissed because they were deemed to present a political question.[386] The *Al-Quraishi et al. v. Nahkla and L-3 Services* is a case in which, after years of litigation, a settlement was reached in 2012, marking the first positive resolution to a United States civil case challenging detainee treatment outside the United States.[387]

101. The first environmental case against private military and security companies was related to the handling of waste and provision of water by the private military companies Kellogg, Brown and Root, LLC, and Halliburton Company, and their subsidiaries, in Iraq and Afghanistan.[388] The case was filed as a class action by United States military personnel, civilian contractors and surviving family members,[389] who complained they had been exposed to health hazards through inhaling the smoke from open-air burn pits and drinking impure water. The United States Court of Appeals restricted its consideration to the political question doctrine, which alone was sufficient for dismissing the case. The District Court had found that the decision to use burn pits for the disposal of non-hazardous waste was based on military judgment,[390] and the military had made all decisions concerning the location of burn

[382] See DCAF, "Legislative guidance tool for States to regulate private military and security companies" (see footnote 367 above), which contains also examples of best practices. For national legislation, see also the OHCHR study, available at www.ohchr.org/EN/Issues/Mercenaries/WGMercenaries/Pages/NationalLegislationStudies.aspx (last accessed on 2 February 2019).

[383] DCAF, "Legislative guidance tool for States to regulate private military and security companies" (see footnote 367 above), p. 2.

[384] United States Court of Appeals, Fourth Circuit, *United States of America v. David A. Passaro*, Nos. 07-4249, 07-4339, 10 August 2009.

[385] *Ibrahim v. Titan Corp.,* 391 Supp 2d 10 (DDC 2005)., *Saleh v. Titan Corp.,* 580 F 3d I (CADC 2009). The FTCA bars suit "for any claim arising out of the combatant activities of the military or naval forces, or the Coast Guard, during time of war".

[386] *In re XE Services Alien Tort Litigation*, 665 F Supp 2d 569 (ED Va 2009*); Estate of Himoud Saed Atban et al v. Blackwater USA et al.*, No. 1:2007cv01831 (D.D.C.2009), 10 October 2007 and *Al-Shimari [et al.] v. CACI Premier Technology, Inc. et al.,* 840 F. 3d 147, 21 October 2016.

[387] *Al-Quraishi et al. v. Nahkla and L-3 Services,* 728 F Supp 2d 702 (D Md 2010) at 35–37, 29 July 2010

[388] United States Court of Appeals, *In re KBR, Inc., Burn Pit Litigation, Metzgar v. KBR, Inc., 4th Cir., No. 17-cv-1960, 6/20/18.*

[389] There were altogether 63 separate complaints on behalf of hundreds of thousands of military personnel and civilian contractors.

[390] *In re KBR, Inc., Burn Pit Litigation, Metzgar v. KBR, Inc.* p. 16.

pits.[391] Furthermore, the military "retained ultimate control over [Kellogg, Brown and Root]'s performance" "and its waste and water services were essential to the military's mission".[392] Extending the political question doctrine to private contractors was justified "[g]iven the unprecedented levels at which today's military relies on contractors to support its mission".[393] A suit against a military contractor could raise a political question if either "the military exercised direct control over the contractor" or "national defense interests were closely intertwined with the military's decisions regarding [the contractor's] conduct".[394] In the *Burn Pit* litigation, the Court of Appeals concluded that the case was non-justiciable because of the former factor.

102. While the litigation was ongoing, changes were initiated in the practice of waste disposal. A report by the United States Government Accountability Office[395] pointed out that the Department of Defense had long recommended that solid waste should not be burned if there is an alternative, in part because of the environmental dangers it poses.[396] The report referred to the harmful health impacts of open-air waste combustion and recommended that the Secretary of Defense improve the adherence by the Department of Defense to relevant guidance on burn pit operations and waste management, and analyse alternatives to its current practices.[397]

103. The judicial practice concerning private military and security companies is fairly limited. All the cases referred to above, furthermore, are related to a situation in which the contracting State is also the contractor's home State. In such specific circumstances, at least, the proximity of private contractors to the State seems to be a major impediment for the establishment of their responsibility at the national level.

C. Proposed draft principles

104. In the light of the above, and taking into account the close link between environmental harm and human health,[398] the following draft principle is proposed:

Draft principle 13 *quinques*

Corporate responsibility

1. States should take the necessary legislative and other measures to ensure that corporations registered or with seat or centre of activity in their jurisdiction can be held responsible for harm caused to human health and the environment in areas of armed conflict or in post-conflict situations. To this effect, States should provide adequate and effective procedures and remedies, which are also available for the victims of the corporate actions.

2. States should take the necessary legislative and other measures to ensure that, in cases of harm caused to human health and the environment in areas of armed conflict or in post-conflict situations, responsibility can be attributed to the corporate entities with *de facto* control of the operations. Parent companies are to be held

[391] *Ibid*., p. 17.
[392] *Ibid*., p.23.
[393] *Ibid*., p. 27.
[394] *Ibid*.
[395] United States, Government Accountability Office, "Afghanistan and Iraq: DOD should improve adherence to its guidance on open pit burning and solid waste management", report to Congressional Requesters. Available at www.gao.gov/new.items/d1163.pdf (last accessed on 3 February 2019).
[396] *Ibid*., p. 10.
[397] *Ibid*., p. 36.
[398] See first report of the present Special Rapporteur (A/CN.4/720 and Corr.1), paras. 63–71.

responsible for ascertaining that their subsidiaries exercise due diligence and precaution.

IV. State responsibility and liability

A. State responsibility and liability for damage related to armed conflict

105. The rules of the law of armed conflict concerning the responsibility and liability of States[399] are clear and well established. According to the Hague Convention IV of 1907, "[a] belligerent party which violates the provisions of the said Regulations shall, if the case demands, be liable to pay compensation. It shall be responsible for all acts committed by persons forming part of its armed forces."[400] The same rule is contained in Additional Protocol I to the Geneva Conventions, which also repeats the phrase "if the case demands".[401] These words could be taken to add relativity to the rule but they have been explained in the ICRC commentary to Additional Protocol I to simply refer to two elementary conditions: the existence of loss or damage that is compensable, and the unavailability of restitution in kind.[402] State responsibility under the law of armed conflict is furthermore somewhat broader than under general rules, as the above-mentioned provisions apply even to private acts of members of armed forces.[403]

106. For State responsibility to arise, the act causing the harm must be attributable to the State and amount to a violation of its international obligation.[404] In the case of environmental harm caused in conflict, this requires a violation of one or more of the substantive rules of the law of armed conflict or other international law applicable to the situation. Such rules include articles 35, paragraph 3, and 55 of Additional Protocol I and their customary counterparts, the principles of distinction, proportionality, military necessity and precautions in attack, as well as other rules concerning the conduct of hostilities, and the law of occupation, also reflected in the draft principles on the present topic. Furthermore, to the extent that international

[399] International or regional organizations are often present in armed conflicts as well as post-conflict situations and may under certain circumstances become parties to an international or non-international armed conflict. The rules of the responsibility of international organizations follow to a large extent the rules of State responsibility. The present section is nevertheless limited to States, for practical reasons related to the available time and space.

[400] Hague Convention IV, art. 3.

[401] Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Geneva, 8 June 1977), United Nations, *Treaty Series*, vol. 1125, No. 17512, p. 3 (Additional Protocol I), art. 91. See also Henckaerts and Doswald-Beck, *Customary International Humanitarian Law: Rules*, vol. I (footnote 83 above), rule 150, p. 537: "A State responsible for violations of international humanitarian law is required to make full reparation for the loss or injury caused". This special rule also applies to private acts of members of armed forces.

[402] As well as to certain conditions related to the protection of cultural property and preventing forced labour by prisoners of war after the cessation of hostilities. See ICRC, Commentary (1987) to Additional Protocol I, art. 91, para. 3655.

[403] *Ibid.* See also M. Sassòli, "State responsibility for violations of international humanitarian law", *International Review of the Red Cross*, vol. 84 (2002), pp. 401–434; C. Greenwood, "State responsibility and civil liability for environmental damage cause by military operations", in R.J. Grunawalt, J.E. King and R.S. McClain (eds.), "Protection of the environment during armed conflict", *International Law Studies*, vol. 69 (1996), pp. 397–415, at pp. 405–406.

[404] Art. 1 of the articles on State responsibility and commentary thereto: "Every internationally wrongful act of a State entails the international responsibility of that State", *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at pp. 32–34.

criminal law provides protection to the environment in armed conflict, the relevant international crimes may trigger State responsibility.[405]

107. Responsibility for environmental harm in conflict may also be based on the law of the use of force (*jus ad bellum*). Violation of Article 2, paragraph 4, of the Charter of the United Nations that amounts to an act of aggression is notably seen to entail responsibility for all damage thereby caused, whether or not resulting from a violation of the law of armed conflict.[406]

108. A further basis for responsibility for conflict-related environmental harm – in particular but not exclusively – in situations of occupation may be found in international human rights obligations. Degradation of environmental conditions may violate a number of specific human rights, including the right to life, the right to health and the right to food, as has been established in the jurisprudence of regional human rights courts and human rights treaty bodies.[407]

109. While the legal framework for State responsibility is clear both in times of peace and in armed conflict, the rules have been implemented unevenly.[408] The establishment of State responsibility for environmental harm has not been the rule even in peacetime. Major environmental catastrophes, whether resulting from industrial accident[409] or military activities[410] have been compensated for without acknowledgement of responsibility. The extensive development of international environmental law in recent decades has not been coupled by similar attention being paid to questions of responsibility and liability, notwithstanding the stated commitment to develop law in that regard in the Stockholm Declaration[411] and the Rio Declaration.[412] This situation has led to "a distinct lack of case law concerning State responsibility for environmental damage"[413] and triggered comments on "the limits of the international law on State responsibility"[414] and the "marked preference [of States] for other frameworks of accountability".[415] The enforcement of

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[405] Para. (3) of the commentary to art. 58, *ibid.*, at p. 142. See also *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Serbia and Montenegro*), *Judgment, I.C.J. Reports 2007*, p. 43, at p. 116, para. 173.

[406] Greenwood, "State responsibility and civil liability for environmental damage cause by military operations" (footnote 403 above), p. 401; ICRC commentary (1987) to Additional Protocol I, art. 91, para. 3650.

[407] See first report of the present Special Rapporteur (A/CN.4/720 and Corr.1), paras. 64–70.

[408] For the history of wartime reparations, see P. d'Argent, *Les réparations de guerre en droit international public. La responsabilité internationale des États à l'épreuve de la guerre* (Brussels, Bruylant, 2002). See also ICRC commentary (1987) to Additional Protocol I, art. 91, para. 3651: "On the conclusion of a peace treaty, the Parties can in principle deal with the problems relating to war damage in general and those relating to the responsibility for starting the war, as they see fit."

[409] For the 1986 Sandoz accident, which released toxic chemicals in the air and resulted in tons of pollutants entering the Rhine river, see P.-M. Dupuy, "L'État et la réparation des dommages catastrophiques", in F. Francioni and T. Scovazzi (eds.), *International Responsibility for Environmental Harm* (Boston, Graham and Trotman, 1991), pp. 125–147; see also T. Scovazzi, "Industrial accidents and the veil of transnational corporations", in *ibid*., pp. 395–427.

[410] In 1946–1958, the United States tested 67 nuclear weapons in the Marshall Islands. Since then, the United States has implemented multiple assistance programmes and issued *ex gratia* payments for personal injuries resulting from the nuclear testing. See para. 153 below.

[411] Principle 22.

[412] Principle 13.

[413] K. Hulme, *War Torn Environment: Interpreting the Legal Threshold* (Leiden, Martinus Nijhoff, 2004), p. 68.

[414] A. Kiss, "Present limits to the enforcement of State responsibility for environmental damage", in Francioni and Scovazzi (eds.), *International Responsibility for Environmental Harm* (footnote 409 above), pp. 3–14; Morgera, *Corporate Accountability in International Environmental Law* (footnote 273 above), pp. 34–38.

[415] Morgera, *Corporate Accountability in International Environmental Law* ((footnote 273 above)), pp. 34–38. See also A. Kiss, "Present limits to the enforcement of State responsibility for

international environmental law has, in recent decades, developed mainly through prevention, compliance mechanisms and civil liability regimes, which have also been considered in the Commission's work.[416] At the same time, an increasing amount of international case law[417] proves that State responsibility remains an option, and can moreover be said to have underpinned the development of other forms of enforcement.[418]

110. Environmental damage caused in conflict was first recognized as compensable under international law by the United Nations Compensation Commission, which was established by the Security Council in 1991 to deal with claims concerning the Iraqi invasion and occupation of Kuwait.[419] The Commission based its jurisdiction on Security Council resolution 687 (1991), which reaffirmed the liability of Iraq under international law "for any direct loss or damage – including environmental damage and the depletion of natural resources – or injury to foreign Governments, nationals and corporations as a result of its unlawful invasion and occupation of Kuwait".[420] As the question of the responsibility of Iraq was thus settled on the basis of a clear violation of *jus ad bellum*, the Commission was able to focus on adjudicating the claims for damage. The Commission's experience in dealing with environmental claims has been groundbreaking in the area of reparations for wartime environmental harm, and an important point of reference beyond armed conflicts.[421] 111. The other relevant example of an international body that could address wartime environmental damage, or had the potential to do so, is the Eritrea-Ethiopia Claims Commission, established in 2000 by a bilateral peace agreement between the former parties to the conflict.[422] The Eritrea-Ethiopia Claims Commission had a mandate to

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environmental damage" (previous footnote).

[416] Articles on the prevention of transboundary harm from hazardous activities, *Yearbook … 2001*, vol. II (Part Two) and corrigendum, para. 98, p. 148; principles on the allocation of loss in the case of transboundary harm arising from hazardous activities, *Yearbook … 2006*, vol. II (Part Two), para. 67, p. 59; draft guidelines on the protection of the atmosphere, *Official Records of the General Assembly, Seventy-third Session, Supplement No. 10* (A/73/10), paras. 77–78, and the fifth report of the Special Rapporteur on the topic, Mr Shinya Murase, A/CN.4/711.

[417] *Gabčíkovo-Nagymaros (Hungary/Slovakia), Judgment, I.C.J. Reports 1997*, p. 7; *Pulp Mills on the River Uruguay (Argentina v. Uruguay), Judgment, I.C.J. Reports 2010*, p. 14, at p. 55, para. 101; *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)* and *Construction of a Road in Costa Rica along the San Juan River (Nicaragua v. Costa Rica), Judgment, I.C.J. Reports 2015*, p. 665; *Whaling in the Antarctic (Australia v. Japan: New Zealand intervening), Judgment, I.C.J. Reports 2014*, p. 226; *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v. Nicaragua)*, Compensation owed by the Republic of Nicaragua to the Republic of Costa Rica, International Court of Justice, 2 February 2018, General List No. 150.

[418] Okowa ("Responsibility for environmental damage" (footnote 415 above), p. 317) points out that "the recognition that ultimate responsibility rests with the State has proved a useful incentive in getting recalcitrant States to adhere to regulatory regimes … a springboard from which all other regulatory and accountability frameworks derive their ultimate legitimacy".

[419] Security Council resolution 692 (1991) established the United Nations Compensation Fund to pay compensation for claims that fell within these categories, and the Compensation Commission to administer the Fund.

[420] Security Council resolution 687 (1991), para. 16.

[421] D.D. Caron, "The profound significance of the UNCC for the environment", in C.R. Payne and P.H. Sand (eds.), *Gulf War Reparations and the UN Compensation Commission. Environmental Liability* (Oxford, Oxford University Press, 2011), pp. 265–275; P. Gautier, "Environmental damage and the United Nations Claims Commission: new directions for future international environmental cases?", in T.M. Ndiaye and R. Wolfrum (eds.), *Law of the Sea, Environmental Law and Settlement of Disputes.* Liber Amicorum *Judge Thomas A. Mensah* (Leiden, Martinus Nijhoff, 2007), pp. 177–214; P.H. Sand, "Compensation for environmental damage from the 1991 Gulf War", *Environmental Policy and Law*, vol. 35 (2005), pp. 244–249.

[422] Agreement on cessation of hostilities between the Government of the Federal Democratic Republic of Ethiopia and the Government of the State of Eritrea (Algiers, 18 June 2000), United Nations, *Treaty Series*, vol. 2138, No. 37273, p. 85; Agreement between the Government of the

decide on claims for loss, damage and injury resulting from the conflict, and on this basis potentially also environmental claims.[423] That Claims Commission found both Eritrea and Ethiopia responsible for violations of the law of armed conflict. Furthermore, it found that Eritrea had unlawfully invaded Ethiopian-controlled territory at the start of the conflict, and thus violated *jus ad bellum.* The claims of Ethiopia related to the loss of environmental resources were based on both grounds: *jus in bello* in the first place and, alternatively, *jus ad bellum*.[424] As regards the former, the Commission unsurprisingly concluded that the destruction fell "well below the standard of widespread and long-lasting environmental damage required for liability" under the law of armed conflict.[425] The *jus ad bellum* ground, however, was accepted and the respective claims were dismissed only because of problems related to the evidence.[426]

112. As a general point, it is interesting to note that the Eritrea-Ethiopia Claims Commission, instead of embracing the traditional position as to the scope of *jus ad bellum* responsibility, decided to limit the liability of Eritrea for the losses that resulted from the unlawful invasion. Such a decision was, in that Commission's opinion, justified in view of several policy considerations. First, the Commission took the view that the scale and gravity of the violation of *jus ad bellum* were not comparable to the Iraqi invasion and occupation of Kuwait or other relevant historic precedents.[427] Second, the Commission paid attention to the economic condition of Eritrea and its limited capacity to pay, as well as to the need to avoid seriously damaging the ability of Eritrea to meet its people's basic needs.[428] Third, the Commission highlighted the need "to ensure that programs for compensation or reparation do not themselves undermine efforts to accomplish a stable peace".[429] Finally, it underlined the need to avoid "[i]mposing extensive liability for conduct that does not violate the *jus in bello*" so as not to risk "eroding the weight and authority of that law".[430] These considerations would have also been relevant for the responsibility for environmental damage, had the respective claims thereon been accepted.

113. The third example is the 2004 advisory opinion of the International Court of Justice concerning the construction of a wall in the Occupied Palestinian Territory.[431] Traditionally, war-related reparations have been paid within a State-to-State framework but the right of individuals to claim reparations for violations of

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Federal Democratic Republic of Ethiopia and the Government of the State of Eritrea for the resettlement of displaced persons, as well as rehabilitation and peacebuilding in both countries (Algiers,
12 December 2000), *ibid.*, No. 37274, p. 93.

[423] Environmental claims were not specifically mentioned in the agreement, see Agreement between the Government of the Federal Democratic Republic of Ethiopia and the Government of the State of Eritrea for the resettlement of displaced persons, as well as rehabilitation and peacebuilding in both countries, art. 5, para. 1.

[424] S.D. Murphy, W. Kidane, and T.R. Snider, *Litigating War: Arbitration of Civil Injury by the Eritrea-Ethiopia Claims Commission* (Oxford, Oxford University Press, 2013), p. 228.

[425] *Partial Award: Central Front – Ethiopia's Claim 2*, 28 April 2004, UNRIAA vol. XXVI, pp. 155–194, at para. 100.

[426] *Final Award, Ethiopia's Damages Claims,* 17 August 2009, UNRIAA vol. XXVI, pp. 631–770, at para. 425

[427] *Ibid.*, para. 312.

[428] *Ibid*., paras. 313–314.

[429] *Ibid*., para. 315.

[430] *Ibid.*, para. 316.

[431] *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory, Advisory Opinion, I.C.J. Reports 2004*, p. 136.

humanitarian law and human rights law has been increasingly recognized.[432] The *Wall* advisory opinion held that Israel "has the obligation to make reparation for the damage caused to all the natural or legal persons concerned" and found that those reparations could entail "compensation or other forms of reparation for the Palestinian population".[433]

114. As a follow-up to the advisory opinion, the General Assembly decided in 2007 to establish the United Nations Register for Damage Caused by the Construction of the Wall in the Occupied Palestinian Territory[434] to record and document the damage caused to natural and legal persons as a result of the construction of the wall by Israel in the Occupied Palestinian Territory, including in and around East Jerusalem. The Register is a subsidiary organ of the General Assembly and does not have the functions of a compensation commission, claims-resolution facility, or judicial or quasi-judicial body. By June 2017, more than 62,600 claims and over 1 million supporting documents had been collected from the Occupied Palestinian Territory and nearly 28,000 claims had been reviewed and decided upon by the Board of the Register.[435] The Register's Rules and Regulations governing the registration of claims allow environmental claims to be made under category F ("Public resources and other").[436] For the time being, a few environmental claims have been filed but not yet reviewed.[437]

115. Finally, a compensation judgment is due in the *Armed Activities* case, in which the International Court of Justice found Uganda responsible for violations of *jus ad bellum*, *jus in bello* and international human rights law, *inter alia*, for "looting, plunder and exploitation of the [Democratic Republic of the Congo]'s natural resources".[438] The Court referred in its 2005 judgment to the well-established rule in general international law that "a State which bears responsibility for an internationally wrongful act is under an obligation to make full reparation for the injury caused by that act" and found that Uganda had an obligation to make reparation accordingly.[439] As the parties were not able to resolve the issue of reparation by way of direct negotiations and indicated in 2015 that there would be no further negotiations, the Court ordered the parties to file memorials and counter-memorials

[432] See, e.g., Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and International Humanitarian Law; *Ahmadou Sadio Diallo (Republic of Guinea v. Democratic Republic of the Congo), Compensation, Judgment, I.C.J. Reports 2012*, p. 324.

[433] *Wall* (footnote 431 above), paras. 152 and 151.

[434] General Assembly resolution ES-10/17 of 15 December 2006.

[435] Progress report of the Board of the United Nations Register of Damage Caused by the Construction of the Wall in the Occupied Palestinian Territory (A/ES-10/756, annex), paras. 4–5.

[436] According to the rules and regulations governing the registration of claims of 19 June 2009, article 11 (Eligibility and assessment of claims), paragraph 1, such claims may not be submitted by individuals. Similarly, only governments and international organizations could file environmental claims directly with the United Nations Compensation Commission. See C.R. Payne, "Legal liability for environmental damage: The United Nations Compensation Commission and the 1990–1991 Gulf War", in Bruch, Muffett and Nichols (eds.), *Governance, Natural Resources, and Post-Conflict Peacebuilding* (footnote 62 above), pp. 719–769, at p. 727. According to Sand, this reflected the role of the claimants as "public trustees or agents for general environmental community interests". See P.H. Sand, "Environmental damage claims from the 1991 Gulf War: State responsibility and community interests", in U. Fastenrath *et al.* (eds.), *From Bilateralism to Community Interest. Essays in Honour of Judge Bruno Simma* (Oxford, Oxford University Press, 2011), pp. 1241–1261, at p. 1258.

[437] Information received from M. Pellonpää, member of the Board of the Register, in December 2018.

[438] *Armed Activities* (footnote 87 above), para. 259.

[439] *Ibid.*

and fixed the final time limit of February 2018. The subsequent procedure has been reserved for further decision.[440]

116. The limited list of examples of State responsibility for environmental harm caused in conflict demonstrate the general pattern of uneven implementation, but also gives rise to a number of specific comments. First, State responsibility only comes into play as a result of a violation of a relevant international legal obligation, while environmental damage in armed conflict may also result from lawful military activities. This would arguably be the case with most environmental harm in conflict, given that the specific prohibitions in the law of armed conflict "do not address normal operational damage to the environment that is left after hostilities cease, from sources such as the use of tracked vehicles on fragile desert surfaces; disposal of solid, toxic, and medical waste; depletion of scarce water resources; and incomplete recovery of ordnance".[441] In other words, much of the environmental harm done in conflict does not violate the law of armed conflict and does not give rise to international responsibility on that ground. It is telling in that respect that the United Nations Compensation Commission, the Eritrea-Ethiopia Claims Commission, and the International Court of Justice in the *Wall* advisory opinion and the *Armed Activities* case have relied on other grounds for responsibility.

117. Second, from the point of view of environmental protection, it may be problematic to regard the establishment of responsibility as a precondition for remediation, to be addressed only after the end of the conflict.[442] As David Caron has pointed out, "[e]nvironmental damage accumulates, and given that restoration is extremely difficult, every effort should be made to address the ongoing harm".[443] For instance, the United Nations Compensation Commission, which otherwise stands out as one of the few successful examples of compensating wartime environmental damage, could only begin the processing of environmental claims some ten years after the war.[444]

118. Third, none of the cases mentioned above deals with the issue of allocation of responsibility between different actors. Security Council resolution 687 (1991) established the overall responsibility of Iraq for all harmful consequences of the aggression. The Governing Council of the United Nations Compensation Commission decided that it would consider claims for any loss resulting from military operations by either side, thus extending the general responsibility of Iraq to damage caused by

[440] *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda), Order of 1 July 2015, I.C.J. Reports 2015*, p. 580, General List No. 116; *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda), Order of 6 December 2016, I.C.J. Reports 2016*, p. 1135. Public hearings on the question of reparation are to be held in March 2019.

[441] C.R. Payne, "The norm of environmental integrity in post-conflict legal regimes", in C. Stahn, J.S. Easterday and J. Iverson (eds.), *Jus Post Bellum: Mapping the Normative Foundation* (Oxford, Oxford University Press, 2014), pp. 502–518, at p. 511.

[442] For the need to address environmental damage during the conflict, see C.R. Payne, "Developments in the law of environmental reparations. A case study of the UN Compensation Commission", in Stahn, Iverson, and Easterday (eds.), *Environmental Protection and Transitions from Conflict to Peace* (footnote 111 above), pp. 329–366, p. 366.

[443] Caron, "The profound significance of the UNCC for the environment" (footnote 421 above), p. 273. Similarly, Payne, "Developments in the law of environmental reparations" (footnote 442 above), p. 366.

[444] M.T. Huguenin *et al*. ("Assessment and valuation of damage to the environment", in Payne and Sand (eds.), *Gulf War Reparations and the UN Compensation Commission Environmental Liability* (footnote 421 above), pp. 67–94, at p. 92) point out that there was limited environmental monitoring until some 10 years after the Iraqi invasion and occupation of Kuwait, which caused large amounts of critical data to be lost.

the military operations of the Allied Coalition Armed Forces.[445] The Eritrea-Ethiopia Claims Commission, for its part, dealt with a conflict between two States in which it was possible to name the aggressor. The International Court of Justice's *Armed Activities* judgment, too, addressed a dispute between two States.[446]

119. The presence of multiple State and non-State actors is nevertheless a common characteristic of armed conflicts today.[447] For instance, seven governments and numerous non-State armed groups were involved in the protracted conflict in the Democratic Republic of the Congo that provided the background for the *Armed Activities* case.[448] Cooperation between several States within the framework of multinational forces, including co-belligerency based on collective self-defence, is also increasingly common. Large coalitions, furthermore, allow for different degrees of participation in, or types of contributions to operations on the ground ranging from direct deployment of forces to more indirect contributions such as training, financing, or provision of materiel or intelligence. All these situations – as well as complicated cooperative arrangements in peacetime – pose intricate questions of allocation of responsibility.

120. The Commission's articles on State responsibility address some such situations in article 16 on "Aid or assistance in the commission of an internationally wrongful act",[449] and in article 47 on the "Plurality of responsible States".[450] Article 16 covers situations in which a State aids or assists another State to breach an obligation by

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[445] Decision taken by the Governing Council of the United Nations Compensation Commission during its third session, at the 18th meeting, held on 28 November 1991, as revised at the 24th meeting held on 16 March 1992 (S/AC.26/1991/7/Rev.1), para. 21 (*a*). This decision has been said to reflect the terms of the Commission's mandate rather than a general rule. See Gautier, "Environmental damage and the United Nations Claims Commission …" (footnote 421 above), p. 193.

[446] Two other cases were discontinued because of jurisdictional issues. See *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Rwanda*), Order of 30 January 2001, General List No. 117; *Armed Activities on the Territory of the Congo (New Application: 2002) (Democratic Republic of the Congo v. Rwanda), Order of 18 September 2002, I.C.J. Reports 2002*, p. 299; *Armed Activities on the Territory of the Congo (New Application: 2002) (Democratic Republic of the Congo v. Rwanda), Jurisdiction and Admissibility, Judgment, I.C.J. Reports 2006*, p. 6; *Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Burundi), Order of 30 January 2001, I.C.J. Reports 2001*, p. 3.

[447] See ICRC, "International humanitarian law and the challenges of contemporary armed conflicts", document prepared for the 32nd International Conference of the Red Cross and Red Crescent, Geneva, 8–10 December 2015, *International Review of the Red Cross*, vol. 97 (2015), pp. 1427–1502, at pp. 1431–1432.

[448] For an enumeration of conflicts on the territory of the Democratic Republic of the Congo, see report on the situation of human rights in the Democratic Republic of the Congo in accordance with Commission on Human Rights resolution 2000/15 (E/CN.4/2001/40), especially annexes V and VI. See also P.N. Okowa, "Congo's war: the legal dimension of a protracted conflict", *British Year Book of International Law 2006*, vol. 77 (2007), pp. 203–255.

[449] According to article 16, "[a] State which aids or assists another State in the commission of an internationally wrongful act by the latter is internationally responsible for doing so if: (*a*) that State does so with knowledge of the circumstances of the internationally wrongful act; and (*b*) the act would be internationally wrongful if committed by that State." *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 65.

[450] According to article 47:
"1. Where several States are responsible for the same internationally wrongful act, the responsibility of each State may be invoked in relation to that act.
2. Paragraph 1:
(*a*) does not permit any injured State to recover, by way of compensation, more than the damage it has suffered;
(*b*) is without prejudice to any right of recourse against the other responsible States."
Ibid., at p. 124. See also art. 17 on direction and control, as well as art. 18 on coercion, *ibid.*, at pp. 67–70.

which both States are bound. A classic example where such assistance, also cited in the relevant commentary, was given is breach of the *jus ad bellum* prohibition of the provision by a State of its territory to be used by another State for an armed attack against a third State.[451] Given that a violation of *jus ad bellum* can well serve as a basis for environmental claims, it is conceivable that State responsibility for environmental damage could on that basis extend to the assisting State. Another example mentioned in the commentary to those articles that may be relevant in the context of the present topic is assistance given to another State to circumvent sanctions imposed by the Security Council;[452] for example, provision of weapons in exchange for conflict resources. The requirement of both States being bound by the same obligation is fulfilled in these examples, but could prove problematic in other situations.[453]

121. The commentary to article 16 foresees two different scenarios of assistance, giving particular consequences, in terms of responsibility. In the first scenario, the act of aiding and assisting rises to the level of co-perpetration and is also a necessary element in the wrongful act, which would otherwise not have taken place. In such cases "the injury suffered can be concurrently attributed to the assisting and the acting State" and both States can be held liable to compensate the victim for all the consequences of the act, in accordance with article 47.[454] In the second scenario, which could be called "aid or assistance proper", the assisting State has only a supportive role in the realization of the wrongful act, and the responsibility and liability of the aiding or assisting State can be adjusted according to the degree to which it has contributed to the injury.[455] Would the wrongful act have occurred in any event, the assisting State is not liable to compensate.[456]

122. Article 16 provides an exception to the principle of independent responsibility that underlies the articles on State responsibility. While the assisting State "will only be responsible to the extent that its own conduct has caused or contributed to the internationally wrongful act",[457] the aid or assistance may be lawful as such and derives its wrongful nature from the conduct of the other State. In other words, the aid or assistance becomes reprehensible because of a connection to the wrongful act.[458] Owing to its exceptional nature, article 16 has a fairly narrow scope of application. In particular, all forms of prohibited assistance under the terms of article 16 require that the assisting State knows of the circumstances of the wrongful act. The commentary furthermore adds that the aid or assistance must be given with a

[451] Para. (8) of the commentary to art. 16, *ibid.*, at pp. 66–67.

[452] *Ibid*. For further examples of situations in which article 16 has been invoked, see H.P. Aust, *Complicity and the Law of State Responsibility* (Cambridge, Cambridge University Press, 2011), pp. 103–174.

[453] V. Lanovoy (*Complicity and its Limits in the Law of International Responsibility* (Portland, Oregon, Hart, 2016), p. 13) argues that it "deprives the rule of much of its practical value".

[454] Para. (10) of the commentary to art. 16 of the articles on State responsibility, *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 67.

[455] *Ibid.*

[456] Para. (1) of the commentary to art. 16, *ibid*., at p. 66.

[457] *Ibid*.

[458] Para. (5) of the general commentary to chap. IV of Part One, *ibid.*, at p. 64. The aiding and assisting may also amount to a separate violation of the State's obligations (for example, illegal abduction of a person to be transferred to and tortured by another State); it bears responsibility for that act but will also be held responsible in connection with the act of torture of the other State. See P. d'Argent, "Reparation, cessation, assurances and guarantees of non-repetition", in A. Nollkaemper and I. Plakokefalos (eds.), *Principles of Shared Responsibility in International Law: An Appraisal of the State of Art* (Cambridge, Cambridge University Press, 2014), pp. 208–250.

view to facilitating the commission of the wrongful act.[459] The emphasis on the intentional element seems particularly justified in situations where the material act of aid or assistance is lawful as such.

123. A particular regime that may be claimed to form *lex specialis* under the law of armed conflict is based on common article 1 of the Geneva Conventions, which requires States Parties thereto to "respect and ensure respect" for the Conventions. The International Court of Justice has held that the obligation to respect and ensure respect in common article 1 derives "from general principles of humanitarian law to which the Conventions merely give specific expression", and that it applies both in international and non-international armed conflicts.[460] Under the negative obligation, States may not encourage, aid or assist other States in violating the Conventions. Under the positive obligation, "they must do everything reasonably in their power to prevent and bring such violations to an end".[461] This obligation, the ICRC commentary further notes, "goes beyond the principle of *pacta sunt servanda*".[462] Moreover, as H.P. Aust has argued, the mere negative obligation, which is absolute and does not require a mental element, goes beyond the rule contained in article 16 of the articles on State responsibility,[463] thus broadening the scope for third State responsibility in situations of armed conflict.

124. Article 47 of the articles on State responsibility, too, recognizes that several States may be responsible for the same internationally wrongful act, but does so only within strict limits. According to the commentary, the article covers situations in which the States concerned have violated the same obligation and are responsible for the same harmful outcome. The wrongful act may be committed jointly or through a common organ. In both scenarios, the responsibility of each State may be invoked in relation to the injury.[464] In the context of an armed conflict, the first option could apply, for example, to a coordinated bombing campaign by several States. In 1999, the Federal Republic of Yugoslavia filed in the International Court of Justice applications instituting proceedings against 11 States for alleged violations of their obligation not to use force against another State and mentioning, *inter alia*, "serious environmental effects on cities, towns and villages in the Federal Republic of Yugoslavia" caused by attacks on oil refineries and chemical plants.[465] The second scenario would be applicable, *inter alia*, to a joint organ established in the context of a military occupation, such as the Coalition Provisional Authority in Iraq in

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[459] Para. (2) of the commentary to art. 16 of the articles on State responsibility, *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 66. See also Aust, *Complicity and the Law of State Responsibility* (footnote 452 above), pp. 266–268.

[460] *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v. United States of America), Merits, Judgment, I.C.J. Reports 1986*, p. 14, at p. 114, para. 220. The Court concluded that the United States was under an obligation not to encourage persons or groups engaged in the conflict in Nicaragua to act in violation of common article 3 of the Geneva Conventions. See also *Wall* (footnote 431 above), para. 157, and *Legality of the Threat or Use of Nuclear Weapons*, *Advisory Opinion, I.C.J. Reports 1996*, p. 226, at p. 257, para. 79.

[461] ICRC commentary (2016) to Geneva Convention I, art. 1, para. 154. It has been argued that the drafters of the Geneva Conventions did not intend to give an international dimension to the obligation to ensure respect. State practice, however, gives support to the broader reading. See Henckaerts and Doswald-Beck, *Customary International Humanitarian Law: Rules*, vol. I (footnote 83 above), pp. 509–513.

[462] *Ibid.*

[463] Aust, *Complicity and the Law of State Responsibility* (footnote 452 above), pp. 385–389.

[464] Para. (2) of the commentary to art. 47 of the articles on State responsibility, *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 124.

[465] The applications were filed against Belgium, Canada, France, Germany, Italy, the Netherlands, Portugal, Spain, the United Kingdom and the United States of America. See, for instance, *Legality of the Use of Force (Yugoslavia v. Spain)*, Application instituting proceedings, 29 April 1999, General List No. 112.

2003–2004.[466] In such situation, however, it was deemed that there was room for individual State responsibility alongside the global responsibility of the Coalition Provisional Authority.[467] For example, in the *Jaloud* case, the European Court of Human Rights found that the conduct of members of the Dutch Armed Forces operating in Iraq under the operational control of the Coalition Provisional Authority was attributable to the Netherlands.[468]

125. Paragraph 2 of article 47 deals with questions of compensation. First, it clarifies that the injured State may not recover by way of compensation more than the amount of the damage it has suffered. Second, the paragraph states that the provision is without prejudice to recourse by one responsible State against another. While article 47 thus foresees that each responsible State may be called to make full reparation to the injured State, the latter is not entitled to double recovery, and the responsible States may agree on an equitable distribution of the burden. Furthermore, the allocation of responsibility may be treaty-based,[469] or the different contributions may be taken into account in the allocation of responsibility in a judicial process.[470] Paragraph 2 thus contributes to some extent to alleviate the criticisms related to the inherent lack of fairness or equity in requiring one State to make the full reparation for an injury to which several States may have contributed.[471] The commentary also points to the specific provisions concerning the forms of reparation in which considerations of fairness have been taken into account.[472]

126. While article 47 only addresses the situation of a plurality of responsible States in relation to the same internationally wrongful act,[473] the commentary refers to the possibility that several States may, by separate internationally wrongful conduct, contribute to the same damage. This would be the case, for example, when several States "contribute to polluting a river by the separate discharge of pollutants".[474] In

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[466] See S. Talmon, "A plurality of responsible actors: international responsibility for acts of the Coalition Provisional Authority in Iraq", in P. Shiner and A. Williams (eds.), *The Iraq War and International Law* (Oxford, Hart, 2008), pp. 185–230. Allied military governments in Germany (1945–1949), Italy (1943–1945) and Japan (1945–1951) can also be mentioned in this context.

[467] See E. Milano, "Occupation", in Nollkaemper and Plakokefalos (eds.), *The Practice of Shared Responsibility in International Law* (footnote 359 above), pp. 733–760, pp. 736, 741 and 750. Similarly, Y. Dinstein, *The International Law of Belligerent Occupation* (Cambridge, Cambridge University Press, 2009), pp. 48–49.

[468] *Jaloud v. Netherlands*, application No. 47708/08 (2014), Judgment, European Court of Human Rights, 20 November 2014, paras. 147–149. Available at http://hudoc.echr.coe.int/eng?i=001-148367 (last accessed on 11 January 2019). The Court found that, while the forces of nations other than the United States and the United Kingdom took their day-to-day orders from foreign commanders, the formulation of essential policy, including distinct rules on the use of force, remained the reserved domain of individual sending States.

[469] Para. (5) of the commentary to art. 47 of the articles on State responsibility, *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 125.

[470] See C. Dominicé, "Attribution of conduct to multiple States and the implication of a State in the act of another State", in J. Crawford, A. Pellet and S. Olleson (eds.), *The Law of International Responsibility* (Oxford, Oxford University Press, 2010), pp. 281–290, at p. 284.

[471] I. Plakokefalos, "Reparation for environmental damage in *jus post bellum*: the problem of shared responsibility", in Stahn, Iverson, and Easterday (eds.), *Environmental Protection and Transitions from Conflict to Peace* (footnote 111 above), pp. 257–273, at p. 264; A. Nollkaemper, "The duality of shared responsibility", *Contemporary Politics*, vol. 24 (2018), pp. 524–544, at p. 528.

[472] Para. (5) of the commentary to art. 34 of the articles on State responsibility: "Concerns have sometimes been expressed that the principle of full reparation may lead to disproportionate and even crippling requirements so far as the responsible State is concerned … In these articles, proportionality is addressed in the context of each form of reparation, taking into account its specific character", *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 96.

[473] See para. (3) of the commentary to art. 47 of the articles on State responsibility, cases in which "a single course of conduct is at the same time attributable to several States and is internationally wrongful for each of them". *Yearbook … 2001*, vol. II (Part Two) and corrigendum, p. 124.

[474] Para. (8) of the commentary to art. 47 of the articles on State responsibility, *Yearbook … 2001*,

such a situation, "the responsibility of each participating State is determined individually, on the basis of its own conduct and by reference to its own international obligations."[475] A classic example, also referred to in the commentary to article 47,[476] is the *Corfu Channel* case, in which Albania was held responsible for failing to notify the United Kingdom of the presence of mines in the channel, while another State had laid the mines.[477] The responsibility of Albania in this case was not derived from the wrongfulness of this other State's conduct but from a breach of an independent obligation.[478]

127. Another example of separate acts by two States contributing to the same damage was described by Judge Simma in his separate opinion in the *Oil Platforms* case.[479] During the 1980–1988 armed conflict between Iraq and Iran, both parties had laid mines in the Persian Gulf without warning to commercial ships. It was impossible to attribute any specific acts to either State. Furthermore, the damage caused by the mine-laying, "i.e. the impediment to the freedom of commerce and navigation", was indivisible and could not be apportioned between them.[480] Applying article 47 to the specific acts would have required, as Judge Simma noted, that Iraq and Iran acted in concert so as to be both responsible for the same acts, something that never happened in reality.[481] At the same time, article 47 could in his view be applicable to the more general claim concerning the creation of negative economic, political and safety conditions in the Gulf.[482]

128. Further legal complications may arise in situations in which States "jointly coordinate, plan, or carry out a particular action with a view to achieving a particular outcome".[483] Such situations are increasingly common in different areas of international cooperation, including in armed conflicts. For example, within a multinational force, the participating States may be bound by different obligations so that, when contributing to the same damage, they do not necessarily violate the same obligation. Coalitions are a common feature of current conflicts and frequently raise questions of "legal interoperability" in the sense that individual member States are bound by different obligations,[484] or do not share the same view on the applicable legal regime.[485]

129. Even more complex questions arise in situations in which third States intervene in an ongoing internal conflict, either in support of a State actor, or one or more non-State armed groups,[486] or against such groups.[487] Such questions are most often related to the classification of conflicts and applicable law, or questions of *jus ad*

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vol. II (Part Two) and corrigendum, paras. 76–77, at p. 125.

[475] *Ibid.*

[476] *Ibid.*

[477] *Corfu Channel case, Judgment on Preliminary Objection, I.C.J. Reports 1948*, p. 15.

[478] Para. (4) of the general commentary to chap. IV of Part I, *Yearbook …* 2001, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 64.

[479] *Oil Platforms (Islamic Republic of Iran v. United States of America), Judgment, I.C.J. Reports 2003*, p. 161, Separate Opinion of Judge Simma.

[480] *Ibid*., p. 353, para. 64.

[481] *Ibid.*, pp. 358–359, para. 76.

[482] *Ibid.*, p. 359, para. 77.

[483] Nollkaemper, "The duality of shared responsibility" (footnote 471 above), p. 525.

[484] For the term, see D.S. Goddard, "Understanding the challenge of legal interoperability in coalition operations", *Journal of National Security Law and Policy*, vol. 9 (2017), pp. 211–232.

[485] K. Abbott, "A brief overview of legal interoperability challenges for NATO arising from the interrelationship between IHL and IHRL in light of the European Convention of Human Rights", *International Review of the Red Cross*, vol. 96 (2014), pp. 107–137.

[486] The conflict in the Democratic Republic of the Congo provides a case in point. See footnote 438 above.

[487] See, e.g., T.D. Gill, "Classifying the conflict in Syria", *International Law Studies*, vol. 92 (2016), pp. 353–380.

bellum,[488] but may also affect issues of responsibility. In the situation described above, several armed conflicts may exist in parallel and the applicable rules of the law of armed conflict "vary depending on the nature of the relationship that each belligerent has with each of the others".[489] The different bodies of the law of armed conflict regulating non-international armed conflicts, international armed conflicts, and situations of occupation may thus be applicable in parallel as, indeed, was the case in the Democratic Republic of the Congo, where a situation of occupation existed alongside of a non-international armed conflict.[490]

130. Furthermore, State responsibility may be triggered by acts of non-State actors in accordance with the rules of attribution. The most relevant situations of attribution would be related to conduct that is directed or controlled by a State,[491] as well as to situations in which a non-State armed group forms the new government of the State.[492] Depending on the degree of control the third State exercises over the non-State armed group, the latter may be qualified as its agent, acting on its behalf, with the result that the third State becomes responsible for the group's acts. Similar questions arise in indirect occupation, in which the occupying State relies on a local surrogate, transitional government or rebel group for the purposes of exercising control over the occupied territory.[493] Other types of non-State actors, such as private military companies, can under certain circumstances exercise elements of governmental authority.[494] Reference can also be made to the obligations of vigilance that apply to an Occupying Power and that may trigger State responsibility in the case of failure to prevent violations of the law of armed conflict or international human rights law, or, for example, significant transboundary harm resulting from acts of non-State actors.[495]

131. In conclusion, the law of State responsibility as codified in the Commission's articles provides the general framework for addressing questions of responsibility and liability in armed conflict. Articles 16 and 47, furthermore, seem to find application in some of the more complex conflict situations in which several States are involved in different ways. At the same time, the two articles remain largely untested. Certain questions raised above, in particular with regard to the law of armed conflict, have been addressed in the jurisprudence of international courts and tribunals, but the practice is still evolving.[496] When it comes to the broader forms of support to war

[488] See M. Lehto, "The fight against ISIL in Syria. Comments on the recent discussion of the right of self-defence against non-State actors", *Nordic Journal of International Law*, vol. 87 (2018), pp. 1–25.

[489] T. Ferraro, "The ICRC's legal position on the notion of armed conflict involving foreign intervention and on determining the IHL applicable to this type of conflict", *International Review of the Red Cross*, vol. 97 (2015), pp. 1227–1252, at p. 1242.

[490] See *Armed Activities* (footnote 87 above), para. 176; *Prosecutor v. Thomas Lubanga Dyilo*, Case No. ICC-01/04-01/06, Judgment pursuant to article 74 of the Statute, Trial Chamber, 14 March 2012, para. 563.

[491] Art. 8 of the articles on State responsibility and commentary thereto, *Yearbook… 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at pp. 47–49.

[492] Art. 10 and commentary thereto, *ibid*., at pp. 50–52. See also the second report on the succession of States with respect to State responsibility of the Special Rapporteur, Mr. P. Šturma, A/CN.4/719, para. 137.

[493] See first report of the present Special Rapporteur (A/CN.4/720 and Corr.1), para. 25.

[494] See art. 5 and commentary thereto of the articles on State responsibility, *Yearbook … 2001*, vol II (Part Two), paras. 76–77, at pp. 42–43.

[495] *Armed Activities* (footnote 87 above), para. 179.

[496] See, for example, on the issue of the requisite standard of control, *Military and Paramilitary Activities* (footnote 460 above), p. 64, para. 115; *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Serbia and Montenegro)* (footnote 405 above), p. 210, para. 404; *Prosecutor v. Duško Tadić*, Case No. IT-94-1-A, Judgment, Appeals Chamber, International Tribunal for the Former Yugoslavia, 15 July 1999, *Judicial Reports 1999*, para. 131; *Prosecutor v. Thomas Lubanga Dyilo*, Case No. ICC-01/04-

efforts that may qualify as prohibited aid or assistance between States, there is less relevant judicial practice, and the same holds true for the application of article 47 on the plurality of responsible States.[497] Furthermore, in any actual situation of wartime damage to the environment, a number of questions are left to be answered by the applicable primary rules of international law.

132. As the present draft principles touch on questions of remediation and reparation, there may be reason to state that they are without prejudice to the rules of State responsibility or any claims that may be raised under such rules for environmental damage caused in conflict.

B. Reparation for environmental harm

133. In the words of the Permanent International Court of Justice, "[i]t is a principle of international law that the breach of an engagement involves an obligation to make reparation in an adequate form".[498] Furthermore, the "reparation must, as far as possible, wipe out all the consequences of the illegal act and re-establish the situation which would, in all probability, have existed if that act had not been committed".[499] The Commission's articles on State responsibility confirm both principles,[500] as well as the priority given to restitution by the Permanent Court of International Justice,[501] provided and to the extent that it is neither materially impossible nor wholly disproportionate.[502] The commentary also underlines that the choice of the adequate

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01/06, Decision on the confirmation of charges, Pre-Trial Chamber I, International Criminal Court, 29 January 2007, para. 211; *Prosecutor v. Thomas Lubanga Dyilo*, Judgment pursuant to article 74 of the Statute (footnote 490 above), para. 541.

[497] For article 16, see, e.g., World Trade Organization, Panel Report, "Turkey – Restrictions on imports of textile and clothing products", WT/DS34/R, 31 May 1999, para. 9.42; *Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Serbia and Montenegro*) (footnote 405 above), para. 420; *El-Masri v. The former Yugoslav Republic of Macedonia*, Application No. 39630/09, Grand Chamber, European Court of Human Rights, Judgment, 13 December 2012, ECHR 2012, para. 97; *Al Nashiri v. Poland*, Application No. 28761/11, Former Fourth Section, Judgment, European Court of Human Rights, 24 July 2014, para. 207. For article 47, see the Partial Award in the *Eurotunnel* case, 30 January 2007, paras. 173-174. See also reports of the Secretary-General on responsibility of States for internationally wrongful acts: compilation of decisions of international courts, tribunals and other bodies: (A/62/62), p. 49, and (A/62/62/Add.1), pp. 6 and 8; (A/68/72), p. 23; and (A/71/80), p. 24. The latest report, in 2017 (A/71/80/Add.1), contains tables reflecting references to the articles on State responsibility by international courts, tribunals and other bodies between 2001 and 2016. According to that report, article 16 has been referred to twice by the International Court of Justice, four times by the European Court of Human Rights, once by the International Criminal Court and once by the International Tribunal for the Former Yugoslavia. Article 47 has been referred to twice by the International Court of Justice and once by an arbitral tribunal.

[498] *Factory at Chorzów*, Judgment No. 8 (Jurisdiction), 1927, P.C.I.J., Series A, No. 9, p. 21.

[499] *Factory at Chorzów, Germany v. Poland*, Judgment No. 13 (Merits), 1928, P.C.I.J., Series A, No. 17, p. 47. See also para. (3) of the commentary to art. 31 of the articles on State responsibility, *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 91.

[500] Art. 31, para. 1, of the articles on the State responsibility, *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 91: the responsible State "is under an obligation to make full reparation for the injury caused by the internationally wrongful act". See also para. (3) of the commentary to art. 31, *ibid*.

[501] See *Chorzów* (footnote 499 above), p. 47. See also para. (3) of the commentary to art. 35 of the articles on State responsibility, *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 97.

[502] Para. (7) of the commentary to art. 35 of the articles on State responsibility, *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 98.

form of reparation (restitution, compensation or satisfaction) depends on the circumstances of the case. [503]

134. These general rules provide the point of departure for the reparation of environmental damage caused to another State, whether in times of peace or conflict. At the same time, environmental damage presents a number of specific difficulties. Restoration, in particular, may be difficult or impossible in the case of environmental destruction.[504] Furthermore, as the International Court of Justice has pointed out, in cases of alleged environmental damage, "particular issues may arise with respect to the existence of damage and causation. The damage may be due to several concurrent causes, or the state of science regarding the causal link between the wrongful act and the damage may be uncertain".[505] Environmental effects may materialize only in the long term, and possibly far away from the place where they were initially caused, which makes it difficult to assess the extent of the damage.[506] Often, environmental damage results from a chain of events, rather than from one single act, which poses challenges to proving the existence of a sufficiently direct causal link.[507] Furthermore, environmental effects are often of a transboundary nature. As pointed out by the Commission, pollution of the sea, if massive and widespread, may affect a single neighbouring State, the coastal States of a region, or the international community as a whole.[508] The valuation of environmental damage requires special techniques.[509] The reparation should moreover be coherent with the objective of environmental remediation. Methods of assessment and valuation of environmental damage have nevertheless been developed in recent practice. In addition to the examples discussed here, investment arbitration tribunals have decided a considerable number of environmental cases.[510]

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[503] Para. (4), *ibid*., at p. 97.

[504] See *Gabčíkovo-Nagymaros (Hungary/Slovakia)* (footnote 417 above), pp. 77–78, para. 140: "The Court is mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations inherent in the very mechanism of reparation of this type of damage."

[505] *Certain Activities Carried Out by Nicaragua in the Border Area,* Compensation owed (footnote 417 above), para. 34.

[506] "First, the distance separating the source from the place of damage may be dozens or even hundreds of miles, creating doubts about the causal link even where polluting activities can be identified"; "Second, the noxious effects of a pollutant may not be felt until years or decades after the act"; "Third, some types of damage occur only if the pollution continues over time"; and "Fourth, the same pollutant does not always produce the same detrimental effects due to important variations in physical circumstances". A.C. Kiss and D. Shelton, *Guide to International Environmental Law* (Leiden, Martinus Nijhoff, 2007), pp. 20–21. See also Dupuy ("L'État et la réparation des dommages catastrophiques" (footnote 409 above), p. 141), who describes the inherent characteristics of ecological damage as follows: "au-delà de ses incidences immédiates et souvent spectaculaires, il pourra aussi être diffus, parfois différé, cumulatif, indirect" [beyond its immediate and often spectacular consequences, it may also be pervasive, sometimes delayed, cumulative, indirect]. For the definition of environmental harm, see Sands *et al., Principles of International Environmental Law*, 4th ed. (footnote 312 above), pp. 741–748.

[507] Payne, "Developments in the law of environmental reparations" (footnote 442 above), p. 353.

[508] Para. (1) of the commentary to art. 33 of the articles on State responsibility, *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at pp. 94–95.

[509] See Hardman Reis (*Compensation for Environmental damage under International Law ...* (footnote 86 above), p. 157), arguing that "due to economic valuation limitations the concept of full restitution can only provide general guidance in relation to the compensation for environmental damages".

[510] See, for example, *Burlington Resources Inc. v. Republic of Ecuador*, Case No. ARB/08/5, Decision on Counter Claims, International Centre for Settlement of Investment Disputes, 7 February 2017. See also Permanent Court of Arbitration, Optional rules for arbitration of disputes relating to natural resources and/or the environment, *Basic Documents*, pp. 179 ff. Since 2012, more than 60 investment disputes have contained some environmental component. See K. Parlett and S. Ewad, "Protection of the environment in investment arbitration – a double-edged sword", Kluwer

135. The commentary to the articles on State responsibility refers to environmental harm mainly in connection with article 36, which deals with compensation. First, the article specifies that compensation shall cover "any financially assessable damage". This notion has sometimes been erroneously read as excluding environmental damage but the commentary makes it clear that compensation is only excluded for such "moral damage" for which satisfaction is a more appropriate form of reparation.[511] Second, the commentary explicitly refers to compensation for environmental damage, or its threat, noting that such compensation normally covers reasonable costs of preventing or remedying pollution, or compensation for the value of polluted property.[512] Third, and most importantly, the commentary states that pure environmental harm is compensable:

> [E]nvironmental damage will often extend beyond that which can be readily quantified in terms of clean-up costs or property devaluation. Damage to such environmental values (biodiversity, amenity, etc. – sometimes referred to as "non-use values") is, as a matter of principle, no less real and compensable than damage to property, though it may be difficult to quantify.[513]

136. The same approach was taken by the International Law Institute in its 1997 resolution on responsibility and liability for environmental damage: "Environmental regimes should provide for the reparation of damage to the environment as such separately from or in addition to the reparation of damage relating to the death, personal injury or loss of property or economic value".[514] The issue was also raised in the proceedings of the United Nations Compensation Commission, which made it clear that "there is no justification for the contention that general international law precludes compensation for pure environmental damage".[515] Furthermore, the Commission's principles on the allocation of loss in the case of transboundary harm confirm the principle of compensation for pure ecological harm, stating that "it is important to emphasize that damage to environment *per se* could constitute damage subject to prompt and adequate compensation"[516] and referring in this regard to the relevant United Nations Compensation Commission decisions.[517]

137. The United Nations Compensation Commission did not attempt to define the concepts of "direct environmental damage" and "depletion of natural resources" in Security Council resolution 687 (1991) but put forward a non-exhaustive list of compensable losses or expenses resulting from:

Arbitration Blog (22 August 2017). Available at http://arbitrationblog.kluwerarbitration.com. In addition, in the period from 2000 to December 2011, 24 investment disputes with environmental components were decided by an arbitral tribunal or solved in another manner (settlement of discontinuance): see J.E. Viñuales, *Foreign Investment and the Environment in International Law* (Cambridge: Cambridge University Press, 2012), pp. 17–18.

[511] Para. (1) of the commentary to art. 36 of the articles on State responsibility, *Yearbook ... 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at pp. 98–99. See also para. (3) of the commentary to art. 37, *ibid.*, at p. 106.

[512] Paras. (8), (13), and (14) of the commentary to art. 36, *ibid.*, at pp. 100–101.

[513] Para. (15), *ibid.*, at p. 101.

[514] International Law Institute, resolution on "Responsibility and Liability under International Law for Environmental Damage", Session of Strasbourg (1997), art. 23.

[515] United Nations Compensation Commission, Governing Council, Report and recommendations made by the Panel of Commissioners concerning the fifth instalment of "F4" claims (S/AC.26/2005/10), para. 58.

[516] Para. (6) of the commentary to principle 3 of the principles on the allocation of loss in the case of transboundary harm arising from hazardous activities, *Yearbook ... 2006*, vol. II (Part Two), para. 98, at p. 73.

[517] Para. (18) of the commentary to principle 2, *ibid.*, at p. 69.

(a) Abatement and prevention of environmental damage, including expenses directly relating to fighting oil fires and stemming from the flow of oil in coastal and international waters;

(b) Reasonable measures already taken to clean and restore the environment or future measures which can be documented as reasonably necessary to clean and restore the environment;

(c) Reasonable monitoring and assessment of the environmental damage for the purposes of evaluating and abating the harm and restoring the environment;

(d) Reasonable monitoring of public health and performing medical screenings for the purposes of investigation and combating increased health risks as a result of the environmental damage; and

(e) Depletion of or damage to natural resources.[518]

138. Because of the lack of baseline information concerning the previous condition of the environment, priority was first given to compensating for costs of monitoring and assessing environmental damage. Substantive environmental claims included claims related to mine clearance and ordnance disposal, cleaning and restoring the damaged environment, damage to public health, and depletion of natural resources and cultural heritage.[519] Most of the environmental claims that were rejected were not dismissed for inadmissibility but for lack of evidence,[520] or for the reason that the areas concerned had already benefited from primary restoration measures.[521] While many claims concerning depletion or damage to natural resources were related to easily quantifiable losses, [522] in practice the United Nations Compensation Commission also dealt with compensation for "pure environmental damage".

139. The Environmental Panel of the United Nations Compensation Commission recognized the "inherent difficulties in attempting to place a monetary value on damaged natural resources, particularly resources that are not traded in the market".[523] The objective was nevertheless set high: the restoration of the environment or resource to the condition in which it would have been, had the invasion and occupation not taken place. In this regard, the Panel held that, in the absence of precise rules or prescriptions of methods for evaluating damage, it was allowed to rely on general principles for guidance, "particularly the principle that reparation must, as far as possible, wipe out all the consequences of the illegal act".[524] It also referred to the *Trail Smelter* case:

> Where the tort itself is of such a nature as to preclude the ascertainment of the amount of damages with certainty, it would be a perversion of fundamental principles of justice to deny all relief to the injured person, and thereby relieve the wrongdoer from making any amend for his acts. In such case, while the damages may not be determined by mere speculation or guess, it will be enough

[518] S/AC.26/1991/7/Rev.1, para. 35. According to Payne ("Developments in the law of environmental reparations" (footnote 442 above), pp. 355–357), the Panel considered this as an indicative list of compensable losses.

[519] See M. Kazazi, "The UNCC Follow-up Programme for Environmental Awards", in Ndiaye and Wolfrum (eds.), *Law of the Sea, Environmental Law and Settlement of Disputes …* (footnote 421 above), pp. 1109–1129, at pp. 1110–1113.

[520] Gautier, "Environmental damage and the United Nations Claims Commission …" (footnote 421 above), p. 209.

[521] *Ibid*., pp. 209–210.

[522] Such as reduced yields of several varieties of agricultural crops, decrease of fisheries catches, salinization and depletion of groundwater resources. *Ibid*., p. 208.

[523] S/AC.26/2005/10, para. 81.

[524] *Ibid.*, para. 80.

if the evidence show the extent of the damages as a matter of just and reasonable inference, although the result be only approximate.[525]

140. In practice, the aim was to restore the environment to pre-invasion conditions "in terms of its overall ecological functioning", rather than attempting to remove specific contaminants or to restore the environment to a particular physical condition.[526] One of the valuation methodologies used with regard to resources "not traded in the market" was the habitat equivalency analysis,[527] a method that has since the 1990s become a widely used tool for determining the appropriate compensation for loss of ecological services.[528] An equivalency-based valuation method seeks to replace lost or damaged resources with resources that provide equivalent ecological services. The value of the loss is then set in terms of the costs of the compensatory restoration projects. Some of the restoration projects awarded by the United Nations Compensation Commission were intended to offset the ecological services that had been lost "between the time of initial damage to the resources and the time of their full recovery", i.e. temporary loss of resource use, [529] but the method was also used in the case of irremediable harm.[530]

141. The Commission's principles on the allocation of loss in the case of transboundary damage also point out that the aim "is not to restore or return the environment to its original state but to enable it to maintain its permanent functions … Where restoration or reinstatement of the environment is not possible, it is reasonable to introduce the equivalent of those components into the environment."[531] A similar clause is contained in the Lugano Convention: "'Measures of reinstatement' means any reasonable measures aiming to reinstate or restore damaged or destroyed components of the environment, or to introduce, where reasonable, the equivalent of these components to the environment."[532] Reasonableness in a post-conflict context can be related to a number of factors, such as lack of institutional capacity, available resources, established land use patterns and the absence of viable livelihood alternatives.[533] The United Nations Compensation Commission also pointed out that

[525] *Trail Smelter case (United States, Canada),* 16 April 1938 and 11 March 1941, UNRIAA, vol. III, pp. 1905-1982, p. 1920, citing United States Supreme Court in *Story Parchment Company v. Paterson Parchment Paper Company* (1931). This approach was also reflected in the International Law Institute's resolution on "Responsibility and Liability under International Law for Environmental Damage", art. 25: "The fact that environmental damage is irreparable or unquantifiable shall not result in exemption from compensation. An entity which causes environmental damage of an irreparable nature must not end up in a possibly more favourable condition [than] other entities causing damage that allows for quantification."

[526] United Nations Compensation Commission, Governing Council, Report and recommendations made by the Panel of Commissioners concerning the third instalment of "F4" claims (S/AC.26/2003/31), para. 48.

[527] The habitat equivalency analysis was used as a valuation technique, *inter alia*, in Jordan, Kuwait and Saudi Arabia: see Payne, "Developments in the law of environmental reparations" (footnote 442 above), p. 358. See also Payne, "Legal liability for environmental damage" (footnote 436 above), p. 738; and Sand, "Compensation for environmental damage from the 1991 Gulf War" (footnote 421 above), p. 247.

[528] See W.H. Desvousges *et al.*, "Habitat and resource equivalency analysis: a critical assessment", *Ecological Economics*, vol. 143 (2018), pp. 74–89. See also Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental harm, *Official Journal of the European Union*, L/143, p. 56.

[529] S/AC.26/2005/10, para. 73.

[530] Payne, "Legal liability for environmental damage" (footnote 436 above), pp. 737–738.

[531] Para. (7) of the commentary to principle 3 of the principles on the allocation of loss, *Yearbook … 2006*, vol. II (Part Two), para. 98, at p. 73.

[532] Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment (Lugano, 21 June 1993), Council of Europe, *Treaty Series*, No. 150, art. 2, para. 8.

[533] Jensen and Lonergan, "Natural resources and post-conflict assessment, remediation, restoration

systematically trying to recreate pre-existing physical conditions would not always be effective and could even pose unacceptable risks of ecological harm in sensitive areas.[534]

142. The recipients of the United Nations Compensation Commission's awards were expected to "take appropriate measures to respond to a situation that poses a clear threat of environmental damage" and "to ensure that any measures taken do not aggravate the damage already caused or increase the risk of future damage". This "duty to mitigate" was, in the view of a Panel of Commissioners constituted by the Compensation Commission, "a necessary consequence of the common concern for the protection and conservation of the environment".[535] The articles on State responsibility similarly recognize the importance of mitigation[536] but deny that the "duty to mitigate" would be a legal obligation that itself gives rise to responsibility. The seemingly different conclusions may be explained by the difference in focus: the Panel of the Compensation Commission had a mandate to deal specifically with environmental damage,[537] which it viewed as one that "entails obligations towards the international community and future generations",[538] while the Commission's articles on State responsibility are generally applicable to any internationally wrongful act. Moreover, both attach the same consequence to a failure to act. According to the articles on State responsibility, "a failure to mitigate by the injured party may preclude recovery to that extent".[539] The Environmental Panel of the Compensation Commission, too, stated that a failure of a claimant to take reasonable action to respond to a situation that poses a clear threat of environmental damage "may constitute a breach of the duty to mitigate and could provide a justification for denying compensation in whole or in part".[540] The same approach was also evident in the measures that the United Nations Compensation Commission took to ensure that the funds awarded for monitoring and assessment of environmental damages were used in an appropriate manner, and in the follow-up programme on environmental restoration and remediation organized after all the claims had been reviewed.[541]

143. The International Court of Justice delivered its first judgment concerning compensation of environmental harm in 2018.[542] In that landmark judgment, the

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and reconstruction: lessons and emerging issues" (footnote 52 above), p. 430.

[534] United Nations Compensation Commission, Governing Council, Report and recommendations made by the Panel of Commissioners concerning part two of the fourth instalment of "F4" claims (S/AC.26/2004/17), para. 50; Gautier, "Environmental damage and the United Nations Claims Commission …" (footnote 421 above), p. 207. See also Payne, "Legal liability for environmental damage" (footnote 436 above), p. 739: for example "the Panel found that some of the damaged wetlands were too sensitive for highly intrusive restoration and should be left to recover more slowly through natural processes."

[535] S/AC.26/2005/10, para. 40.

[536] Para. (11) of the commentary to art. 31 of the articles on State responsibility, *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 93: "Even the wholly innocent victim of wrongful conduct is expected to act reasonably when confronted by the injury".

[537] According to Payne, "Legal liability for environmental damage" (footnote 436 above), p. 736 "The UNCC environmental decisions focused on the protection and restauration of environmental integrity and were based on the principles of precaution, common concern, obligations to future generations, and the value of ecosystems, in addition to long-standing principles of international law."

[538] S/AC.26/2005/10, para. 40.

[539] Para. (11) of the commentary to art. 31 of the articles on State responsibility, *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at p. 93.

[540] S/AC.26/2003/31, para. 42.

[541] Payne, "Developments in the law of environmental reparations" (footnote 442 above), p. 359. See also Sand, "Environmental damage claims from the 1991 Gulf War" (footnote 436 above) and Kazazi, "The UNCC Follow-up Programme for Environmental Awards" (footnote 519 above).

[542] *Certain Activities Carried Out by Nicaragua in the Border Area*, Compensation owed (footnote

Court confirms in clear terms the compensability of pure environmental damage under international law. According to the Court, "it is consistent with the principles of international law governing the consequences of internationally wrongful acts, including the principle of full reparation, to hold that compensation is due for *damage caused to the environment, in and of itself*".[543] Further elaborating this statement, the Court held that "damage to the environment, and the consequent impairment or loss of the ability of the environment to provide goods and services, is compensable under international law".[544] The notion of "goods and services" is understood to refer both to those that are traded on the market, such as timber, and those that are not, such as flood prevention or gas regulation.[545]

144. The Court recognized the difficulties related to valuation of environmental damage but cited the *Factory at Chorzów*[546]and *Trail Smelter*[547] cases[548] in support of the view that, in spite of such difficulties, the Court has to decide whether there is a sufficient causal nexus between the wrongful act and the injury suffered.[549] Referring to equitable considerations and the *Diallo* case,[550] the Court underlined that "the absence of adequate evidence as to the extent of material damage [would] not, in all cases, preclude an award of compensation for that damage".[551] Finally, the Court awarded compensation to Costa Rica for both environmental damage and costs and expenses incurred in connection with the unlawful activities of Nicaragua.[552]

145. It is furthermore notable that the Parties in that case were in agreement on the compensability of environmental damage under international law[553] and disagreed only on the methodology to be used for valuating the damage.[554] The Court did not deny the relevance of the methodologies proposed by the Parties, but pointed out that international law does not prescribe any specific method of valuation of environmental damage; it was furthermore necessary to take into account the specific circumstances and characteristics of each case.[555] The question of valuating environmental damage was therefore approached "from the perspective of the ecosystem as a whole, by adopting an overall assessment of the impairment or loss of environmental goods and services prior to recovery".[556] The Court stated further that full account was taken of the impairment or loss of environmental goods and services in the period prior to recovery. While the method of overall assessment was not further explained,[557] three aspects of the judgment are worth highlighting in this context.

146. First, the case concerned illegal activities in the Northeast Caribbean Wetland, including removal of more than 300 mature trees. According to the Court, this amounted to "the most significant damage to the area, from which other harms to the environment arise". An overall valuation meant that the correlation between the

417 above).

[543] *Ibid*., para. 41, emphasis added.

[544] *Ibid.*, para. 42.

[545] *Ibid.*, para. 47.

[546] *Ibid*., para. 29.

[547] *Ibid*., para. 35.

[548] See above paras. 133 and 139.

[549] *Certain Activities Carried Out by Nicaragua in the Border Area*, Compensation owed (footnote 417 above), para. 35.

[550] *Ahmadou Sadio Diallo* (footnote 432 above), p. 337, para. 33.

[551] *Certain Activities Carried Out by Nicaragua in the Border Area*, Compensation owed (footnote 417 above), para. 35.

[552] *Ibid*., para. 152.

[553] *Ibid*., paras. 39–40.

[554] *Ibid*., paras. 44–51.

[555] *Ibid.*, para. 52.

[556] *Ibid*., para. 78.

[557] See, however, *ibid.*, Separate Opinion of Judge Donoghue and Dissenting Opinion of Judge *ad hoc* Dugard, which shed some light on the question.

removal of the trees and the harm caused to other environmental goods and services (such as other raw materials, gas regulation and air quality services, and biodiversity in terms of habitat and nursery) was taken into account.[558]

147. Second, the Court emphasized the nature of the affected area as an internationally protected wetland under the Ramsar Convention, as well as the interlinkages between various environmental goods and services. According to the Court, "[w]etlands are among the most diverse and productive ecosystems in the world. The interaction of the physical, biological and chemical components of a wetland enable it to perform many vital functions, including supporting rich biological diversity, regulating water régimes, and acting as a sink for sediments and pollutants."[559]

148. In this regard, reference can be made here to the United Nations Compensation Commission Environmental Panel's reasoning when faced with the claim of Iraq that only such damage to the environment that exceeded a certain threshold, for example, that of "significant" harm, could be awarded.[560] According to the Environmental Panel, damage that might otherwise be characterized as "insignificant" shall be assessed differently when it "is caused to an area of special ecological sensitivity, or where the damage, in conjunction with other factors, poses a risk of further or more serious environmental harm". In such cases, remediation measures to prevent or minimize potential additional damage to the environment could well be justified.[561]

149. Third, the overall valuation allowed the Court to take into account the capacity of the damaged area for natural regeneration. In this regard, it notably relied on the opinions of the Secretariat of the Ramsar Convention.[562]

150. In conclusion, the principle of the compensability of pure environmental damage under international law is widely recognized. According to the International Court of Justice, "it is consistent with the principles of international law governing the consequences of internationally wrongful acts, including the principle of full reparation, to hold that compensation is due for damage caused to the environment, in and of itself, in addition to expenses incurred by an injured State as a consequence of such damage."[563] Furthermore, reference can be made to the concurrent views of the United Nations Compensation Commission[564] and the Commission itself.[565]

C. *Ex gratia* payments and victims assistance

151. In practice, States and international organizations have used *ex gratia* payments to make amends for wartime injury and damage without acknowledging responsibility, and often excluding further liability. Such payments serve different purposes and may be available for damage and injury caused by lawful action.[566] In

[558] *Certain Activities Carried Out by Nicaragua in the Border Area*, Compensation owed (footnote 417 above), para. 79.
[559] *Ibid.,* para. 80.
[560] S/AC.26/2003/31, para. 33.
[561] *Ibid*., para. 36.
[562] *Certain Activities Carried Out by Nicaragua in the Border Area*, Compensation owed (footnote 417 above), para. 81.
[563] *Ibid.*, para. 41.
[564] See para. 136 and footnote 510 above.
[565] See para. 135 and footnote 507; para. 136 and footnote 511 above.
[566] University of Amsterdam and Center for Civilians in Conflict, "Monetary payments for civilian harm in international and national practice" (2015). See also United States, Government Accountability Office, "Military operations. The Department of Defense's use of solatia and condolence payments in Iraq and Afghanistan", Report, May 2007; and W.M. Reisman, "Compensating collateral damage in elective international conflict", *Intercultural Human Rights Law Review*, vol. 8 (2013), pp. 1–18.

most cases, amends are paid for civilian injury or death, or damage to civilian property, but they may also entail remediation of harm to the environment. Victims assistance is a broader and more recent concept used in relation to armed conflicts – but also in other contexts – to respond to harm caused to individuals or communities, *inter alia* by military activities.[567] The brief overview given below of some such schemes is intended as a complement to the consideration of reparations based on legal obligation.

152. The payments related to the use of Agent Orange (a herbicide containing the toxic substance dioxin), by the United States in the Viet Nam War provide an example of response to environmental and health effects of armed conflict. Between 2007 and 2018, the United States Congress authorized payments to address the environmental and health damage attributed to the use of Agent Orange in Viet Nam. In 2018, a further amount was appropriated by Congress for assistance related to Agent Orange exposure in Viet Nam. Working in cooperation with the Government of Viet Nam, the United States has funded programmes to remediate dioxin-contaminated soil. Most of the funds appropriated have been used for the environmental cleanup of Da Nang airport, one of the major airbases used for storing and spraying the herbicides between 1961 and 1971. A smaller amount of the funds appropriated has been used to assist persons with disabilities, generally in the vicinity of Da Nang or other dioxin-contaminated areas. [568]

153. Payments have also been made in relation to nuclear tests, one of the first examples being in the context of the Marshall Islands Nuclear Claims Tribunal. In the 1940s and 1950s, the United States tested 67 nuclear weapons in the Marshall Islands. Since then, multiple assistance programmes have been implemented. Pursuant to the Compact of Free Association between the United States and the Republic of the Marshall Islands,[569] the Nuclear Claims Tribunal was established to adjudicate claims for compensation related to the nuclear testing programme. The Tribunal has awarded compensation for personal injuries suffered as a result of radiation exposure, including to persons who were downwind from the detonations, and biological children of mothers who were present at the test sites. The Nuclear Claims Tribunal does not, however, require a proof of causality as a condition for providing assistance.[570] The Tribunal has also awarded compensation for property damage.

154. Between 1952 and 1963, the United Kingdom conducted a number of nuclear tests on the Australian mainland and surrounding islands. In the following decades,

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[567] See, e.g., Handicap International, "Victim assistance in the context of mines and explosive remnants of war" (July 2014), available at https://handicap-international.ch/files/documents/files/assistance-victimes-mines-reg_anglais.pdf. See also International Human Rights Clinic, Harvard Law School, "Environmental remediation under the treaty on the prohibition of nuclear weapons" (April 2018). Available at http://hrp.law.harvard.edu/wp-content/uploads/2018/04/Environmental-Remediation-short-5-17-18-final.pdf.
See also Basic Principles and Guidelines on the Right to a Remedy and Reparation for Victims of Gross Violations of International Human Rights Law and Serious Violations of International Humanitarian Law. Principle 9 states that "[a] person shall be considered a victim regardless of whether the perpetrator of the violation is identified, apprehended, prosecuted, or convicted".

[568] See United States, Congressional Research Service, "U.S. Agent Orange/Dioxin Assistance to Vietnam (updated on February 21, 2019)". Available at https://fas.org/sgp/crs/row/R44268.pdf (last accessed on 12 March 2019).

[569] Compact of Free Association, Agreement of 25 June 1983 between the United States and the Republic of the Marshall Islands, which was amended in 2003.

[570] A claimant does not have to prove that radiation exposure caused the personal injury. Rather, all persons who can prove residency in the relevant time period and have contracted one of the eligible diseases are entitled to compensation. For a detailed description of the assistance programmes in the Marshall Islands to date, see T. Lum *et al.*, United States, Congressional Research Service, "Republic of the Marshall Islands *Changed Circumstances Petition* to Congress (Updated May 16, 2005)", pp. 7–16.

Governments of both countries have taken measures to provide compensation to individuals who suffered medical harm from the testing. Assistance to individuals harmed by the nuclear testing conducted by the United Kingdom in Australia in the 1950s and 1960s has been primarily given through Australian legislation, in particular the Australian Participants in British Nuclear Tests and British Commonwealth Occupation Force (Treatment) Act of 2006.[571] The Act provides for coverage of the health-care costs of three categories of persons: Australian participants in the British nuclear tests, civilians present near the nuclear test sites in the 1950s and 1960s, and Australian veterans who served in Japan during the occupation following the Second World War. Payments are notably due to such persons regardless of whether or not their medical condition is related to involvement in the British nuclear tests or service in the occupation of Japan. In 2017, the Government of Australia approved a further federal budget package providing full health benefits to indigenous people and service members not covered by the original Act.[572]

155. In 1993, the United Kingdom agreed to an *ex gratia* payment to assist in the clean-up of the Maralinga site, one of the nuclear testing facilities.[573] The Government of Australia furthermore paid compensation to the Maralinga Tjarutja, the Aboriginal community that lost access to land due to contamination, "in settlement of its claims concerning contamination and denial of access to test site land."[574]

156. A further example in the same area concerns payments to individuals harmed by nuclear testing by France in Algeria and French Polynesia between 1960 and 1996. The nuclear tests exposed an estimated 150,000 civilians and service members to significant levels of radiation.[575] The payments have been made possible by a special law, the *Loi Morin*, [576] the purpose of which is to provide financial compensation to individuals suffering from medical conditions caused by nuclear testing. In 2017, amendments were made to the law broadening its scope of application.[577] Since then, reports have indicated a significant increase in the number of individuals who have successfully applied for financial compensation.[578]

157. An example of environmental remediation in a situation in which the establishment or implementation of State responsibility is not possible is provided by the assistance to Lebanon following the bombing of the Jiyeh power plant in 2006. After the strike on the power plant on the Lebanese coast by Israeli Armed Forces, an

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[571] Australian Participants in British Nuclear Tests and British Commonwealth Occupation Force (Treatment) Act, No. 135 (2006). Available at www.legislation.gov.au/Details/C2017C00221 (last accessed on 8 January 2019).

[572] *Ibid.*

[573] See G. Wyeth, "Recognizing Australia's nuclear past", 10 May 2017. Available from https://thediplomat.com/2017/05 (last accessed on 8 January 2019).

[574] Information available at https://archive.industry.gov.au/resource/Radioactivewaste/ (last accessed on 8 January 2019).

[575] See Deutsche Welle, "French nuclear test victims reprise compensation struggle". Available at www.dw.com/en/.

[576] Act No. 2010-2 of 5 January 2010 relating to the recognition and compensation of victims of the French nuclear tests (loi n° 2010-2 du 5 janvier 2010 relative à la reconnaissance et à l'indemnisation des victimes des essais nucléaires français). Available at www.legifrance.gouv.fr/eli/loi/2010/1/5/DEFX0906865L/jo/texte (last accessed on 16 January 2019). In 2017, the law was amended, see consolidated version of 2 December 2018 (Version consolidée du 02 décembre 2018). Available at www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000021625586&dateTexte=20181202.

[577] *Ibid.*

[578] France, Department for the Monitoring of Nuclear Testing Centres, "*Loi Morin – Indemnisation des victimes des essais nucléaires* DSCEN, Fiche à l'attention des membres du COSCEN", 28 September 2018. Available at www.presidence.pf/wp-content/uploads/2018/09/Loi-Morin-Indemnisations.pdf (last accessed on 8 January 2019).

estimated 15,000 tons of oil were released into the Mediterranean Sea.[579] Following requests for assistance from the Government of Lebanon, the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea provided remote and on-site technical assistance in the cleanup. Assistance was provided pursuant to the 2002 Protocol concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea,[580] one of protocols to the Barcelona Convention.[581]

158. Reference can also be made to particular assistance programmes implemented at the national level. One such programme is based on the Atomic Bomb Survivors' Support Law of 1994 of Japan.[582] Japan has implemented several assistance programmes for survivors of the atomic bombings of Hiroshima and Nagasaki in 1949. The 1994 law expanded the definition of victims eligible for assistance, recognizing the intergenerational effects of radiation exposure. It covers those who were within the area of the bombings at the time of the attacks, those who entered the area of the bombings within two weeks after the explosions, relief workers, and the children of those in the first three categories who were *in utero* at the time of the attacks. Eligible persons receive health monitoring, medical treatment and financial support.

159. A further example concerns assistance for Ukrainian victims of the Chernobyl nuclear disaster. In 1991, after the immediate disaster response ended and the ongoing needs of the victims became clear, Ukraine passed new laws to help people impacted by the disaster.[583] The Law on the legal status of the territory subjected to radioactive contamination as a result of the Chernobyl catastrophe concerns radiation testing for areas that may have been impacted by the accident, controls on the levels of radiation present on land, and economic and medical aid to victims. The Law on the status and social protection of the citizens who suffered as a result of the Chernobyl catastrophe creates social, economic, and medical assistance rights for victims. The Ukrainian legislation provides diverse types of victim assistance, including environmental remediation, medical assistance, social and economic inclusion, and information sharing, in addition to different forms of financial payments.

160. In the aftermath of the September 11, 2001 terrorist attacks, the United States Congress approved a health programme to provide for medical care and expense reimbursement to affected responders to the attacks.[584] Eligible individuals can apply to receive reimbursement for monitoring and medically necessary treatments. They include those who contracted an "illness or health condition for which exposure to airborne toxins [or] any other hazard" resulting from the attacks "is substantially likely to be a significant factor in aggravating, contributing to, or causing the illness or health conditions". The programme does not require a determination that exposure

[579] O. Macharis and N. Farajalla, Case Study on the 2006 Israel–Lebanon War and its Impact on Water resources and Water Infrastructure in Lebanon. On file with the author.

[580] Protocol concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea (Valetta, 25 January 2002), United Nations, *Treaty Series*, vol. 2942, annex A, No. 16908, p. 87

[581] Convention for the Protection of the Mediterranean Sea against Pollution (Barcelona, 16 February 1976), *ibid.*, vol. 1102, No. 16908, p. 27.

[582] Atomic Bomb Survivors Relief Department, Social Affairs Bureau, Hiroshima, "Summary of relief measures for atomic bomb survivors" (2003). Available at www.city.hiroshima.lg.jp/shimin/heiwa/relief.pdf (last accessed on 8 January 2019).

[583] See O. Nasvit, "Legislation in Ukraine about the radiological consequences of the Chernobyl accident" (Research Reactor Institute Report, 1998). Available at www.rri.kyoto-u.ac.jp/NSRG/reports/kr21/kr21pdf/Nasvit1.pdf (last accessed on 12 January 2019).

[584] 42 U.S.C. 300MM-22. See World Trade Center Health Program, available at www.cdc.gov/wtc (last accessed on 12 January 2019).

to contaminants was the sole cause of the health condition but covers cases in which the exposure was substantially likely to be a factor in causing the condition.

161. In conclusion, it can be noted that the above examples, in spite of their variance in terms of context, circumstances and grounds for remediation, share certain common features apart from the provision of remediation without the establishment of responsibility. *Ex gratia* payments and victims assistance entail shifting the focus from the liable party to the party suffering the harm, from the legal violation to the injury suffered by the victim.[585] While the examples above mostly deal with monetary compensation or reparation that has an economic component, such as payments, other financial compensation or free medical and health services, the victim's perspective may also support broader and needs-based assistance. The nature of e*x gratia* payments is complex, ranging from "an implicit recognition of fault"[586] to a negotiated outcome, and may serve different objectives. *Ex gratia* payments and other types of remediation without the establishment of responsibility may also be available when there is no, or no proven, violation of the applicable legal norms. They can be seen as pragmatic measures that provide a limited contribution to the implementation of the relevant international norms in the absence of full liability, and can also prove useful in the area of environmental remediation.[587]

D. Proposed draft principles

162. In the light of the above, the following draft principle is proposed:

Draft principle 13 *quater*

Responsibility and liability

1. These draft principles are without prejudice to the existing rules of international law on responsibility and liability of States.

2. When the source of environmental damage in armed conflict is unidentified, or reparation from the liable party unavailable, States should take appropriate measures to ensure that the damage does not remain unrepaired or uncompensated, and may consider the establishment of special compensation funds or other mechanisms of collective reparation for that purpose.

3. Damage to the environment for the purposes of reparation shall include damage to ecosystem services, if established, irrespective of whether the damaged goods and services were traded in the market or placed in economic use.

[585] See, e.g., the Basic Principles on the Right to a Remedy and Reparation. Principle 9 states that "[a] person shall be considered a victim regardless of whether the perpetrator of the violation is identified, apprehended, prosecuted, or convicted". See also principle 15 on the obligation to provide reparation which is tied to an act or omission attributed to the State and constituting a gross violation of international human rights law or a serious violation of international humanitarian law.

[586] Hardman Reis, *Compensation for Environmental damage under International Law …* (footnote 86 above), p. 124.

[587] *Ibid.*, pp. 122–125. See also paras. (11)–(13) of the commentary to art. 36 of the articles on State responsibility, *Yearbook … 2001*, vol. II (Part Two) and corrigendum, paras. 76–77, at pp. 100–101.

V. Additional issues

A. Environmental modification techniques

163. A proposal was made during the Commission's seventieth session that the present report should consider the prohibition of the use of environmental modification techniques for military or any other hostile aims having widespread, long-lasting or severe effects as the means of destruction, damage or injury to another State, and propose a draft principle along those lines.[588] The lack of such a provision based on the 1976 Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques was seen as an obvious gap in the set of draft principles.

164. The Convention prohibits military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects.[589] An environmental modification technique is defined as a "technique for changing – through the deliberate manipulation of natural processes – the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space".[590]

165. The Convention was raised in the Commission's earlier discussions on the present topic. The first Special Rapporteur notably referred to the Convention as being among "[t]he most well-known provisions germane to the protection of the environment".[591] Two considerations were further put forward. First, it was noted that the Convention did not spell out clearly whether the prohibition of the use of environmental modification techniques could apply to a non-international armed conflict, in particular as the obligation in article 1, paragraph 1, was phrased as an inter-State one.[592] According to paragraph 1 of article 1 of the Convention, "[e]ach State Party to this Convention undertakes not to engage in military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to any other State Party".

166. The formulation of paragraph 1 is clear that the Convention only prohibits environmental modification that causes damage to another party to the Convention. This condition could nevertheless also be fulfilled in a non-international armed conflict provided that a hostile use of an environmental modification technique by a State in the context of such a conflict causes environmental damage in the territory of another State party.[593] The environmental modification techniques addressed in the Convention – capable of causing "earthquakes; tsunamis; an upset in the ecological balance of a region; changes in weather patterns (clouds, precipitation, cyclones of various types and tornadic storms); changes in climate patterns; changes in ocean currents; changes in the state of the ozone layer; and changes in the state of the ionosphere"[594] – could well be expected to produce transboundary effects.

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[588] Mr. Vásquez-Bermúdez (A/CN.4/SR.3430), pp. 7–8.

[589] Art. I, para. 1.

[590] *Ibid.*, art. II.

[591] Second report of Ms. Jacobsson (A/CN.4/685), para. 124.

[592] *Ibid*., para. 139.

[598] Henckaerts and Doswald-Beck, *Customary International Humanitarian Law: Rules*, vol. I (footnote 83 above), rule 44, commentary, p. 148: "it can be argued that the obligation to pay due regard to the environment also applies in non-international armed conflicts if there are effects in another State."

[594] "Understanding relating to article II", *Official Records of the General Assembly, Thirty-first Session, Supplement No. 27* (A/31/27), p. 92.

167. Reference was also made in this context to the Manual on the Law of Non-International Armed Conflicts,[595] which does not contain a specific rule based on the Convention. At the same time, the Manual's reference to the Convention[596] can be seen to indicate that the authors consider the Convention applicable also in a non-international armed conflict.[597] Reference can furthermore be made to the view of one of the authors of the Manual that "the … Convention is germane to any situation in which an environmental modification technique is deliberately resorted to for military or other hostile purposes and inflicts sufficient injury on another State Party".[598]

168. The second pertinent consideration relates to the potential customary law status of the prohibition addressed by the Convention.[599] Reference was made by the first Special Rapporteur, in particular, to the threshold of harm (widespread, long-lasting or severe effects) under the Convention, which differs from that set forth in articles 35, paragraph 3 and 55 of Additional Protocol I to the Geneva Conventions. The difference between the two instruments is not limited to the use of the disjunctive term "or" in the Convention as compared to the conjunctive term "and" in Additional Protocol I, but also stems from the terms "widespread", "long-lasting" and "severe". The latter three terms have, moreover, been explained in the Understanding relating to Article 1 of the Convention in a way that departs from Additional Protocol I. According to the Understanding, the term "widespread" encompasses an area on the scale of several hundred square kilometres, "long-lasting" implies "a period of months, or approximately a season" and "severe" involves "serious or significant disruption or harm to human life, natural and economic resources or other assets".[600] There is no similar gloss available for Additional Protocol I but the ICRC commentary points out that, at the diplomatic conference that eventually adopted the Additional Protocol, several delegations indicated that, in their opinion, the words "widespread, long-term and severe" in the Protocol did not have the same meaning as the corresponding words in the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques.[601]

169. The difference does not only concern particular words. It should be recalled that the two prohibitions have a different scope and purpose. The Convention only applies to deliberate manipulation of the environment, while the prohibition in Additional Protocol I covers intended or expected impacts of any military operations Furthermore, the Understanding attached to article 1 of the Convention states that the

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[595] M.N. Schmitt, C.H.B. Garraway and Y. Dinstein, *The Manual on the Law of Non-International Armed Conflict, with Commentary* (San Remo, International Institute of Humanitarian Law, 2006).

[596] In particular, as prohibiting "modifying" the environment as a method of combat if doing so results in widespread, long-lasting or severe effects on the environment (sect. 4.2.4, para. 2).

[597] Second report of Ms. Jacobsson (A/CN.4/685), para. 189.

[598] Y. Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict*, 2nd ed. (Cambridge, Cambridge University Press, 2010), p. 243. Dinstein notably refers to cross-border damage in this context. See also T. Meron, "Comment: protection of the environment during non-international armed conflicts", in J.R. Grunawalt, J.E. King and R.S. McClain (eds.), *International Law Studies*, vol. 69, *Protection of the Environment During Armed Conflict*, (Newport, Rhode Island, Naval War College, 1996), pp. 353–358, stating, at p. 354, that the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques "is applicable in all circumstances".

[599] Henckaerts and Doswald-Beck (*Customary International Humanitarian Law: Rules*, vol. I (footnote 83 above), p. 156) conclude that "irrespective of whether the provisions of the … Convention are themselves customary, there is sufficiently widespread, representative and uniform practice to conclude that the destruction of the natural environment may not be used as a weapon".

[600] Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, "Understanding relating to article I" (A/31/27), p. 91.

[601] ICRC commentary (1987) to Additional Protocol I, art. 55, para. 2136.

interpretation of the three terms is intended "exclusively" for the Convention and is not intended to "prejudice the interpretation of the same or similar terms" in other instruments.[602]

170. According to the ICRC study on customary international humanitarian law, "there is sufficiently widespread, representative and uniform practice to conclude that the destruction of the natural environment may not be used as a weapon", and this irrespective of whether the provisions of the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques are themselves customary.[603] The ICRC Guidelines on the Protection of the Environment in time of Armed Conflict also contain a guideline based on articles I and II of the Convention.[604]

171. As a further reason for including in the draft principles a principle on environmental modification techniques, reference can be made to the draft guidelines on the topic "Protection of the atmosphere". Draft guideline 7, adopted on first reading at the Commission's seventieth session, deals with intentional large-scale modification of the atmosphere. The commentary to that guideline relies on the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques for the definition of "activities aimed at intentional large-scale modification of the atmosphere".[605]

172. The Special Rapporteur sees merit in including in Part One of the draft principles a draft principle phrased in accordance with article 1, paragraph 1, of the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques. The definition of an environmental modification technique in article II of the Convention (an environmental modification technique is considered a "technique for changing – through the deliberate manipulation of natural processes – the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space") could be reflected in the commentary.

B. Martens Clause

173. The Martens Clause originally appeared in the preamble to the 1899 Hague Convention (II) with Respect to the Laws and Customs of War on Land,[606] and was

[602] Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques, "Understanding relating to article I" (A/31/27), p. 91.

[603] Henckaerts and Doswald-Beck, *Customary International Humanitarian Law: Rules*, vol. I (footnote 83 above), p. 156.

[604] ICRC, "Guidelines for military manuals and instructions on the protection of the environment in times of armed conflict, *International Review of the Red Cross*, No. 311 (1996), guideline 12.

[605] Paras. (2), (3) and (5) of the commentary to draft guideline 7 of the draft guidelines on the protection of the atmosphere, adopted on first reading, *Official Records of the General Assembly, Seventy-third Session, Supplement No. 10* (A/73/10), para. 78, at pp. 181–182.

[606] Convention (II) with Respect to the Laws and Customs of War on Land (The Hague, 29 July 1899), J.B. Scott (ed.), *The Hague Conventions and Declarations of 1899 and 1907*, 3rd ed. (New York, Oxford University Press, 1915), p. 100. The 1899 Martens Clause reads: "Until a more complete code of the laws of war is issued, the high contracting Parties think it right to declare that in cases not included in the Regulations adopted by them, populations and belligerents remain under the protection and empire of the principles of international law, as they result from the usages established between civilized nations, from the laws of humanity, and the requirements of the public conscience." A modern version reads: "In cases not covered by this Protocol or by other international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience" (Additional Protocol I, art. 1, para. 2). For a

restated in all the four Geneva Conventions,[607] the Additional Protocols thereto,[608] and the preamble to the Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons.[609] The Martens Clause provides, in essence, "that even in cases not covered by specific international agreements, civilians and combatants remain under the protection and authority of the principles of international law derived from established custom, from the principles of humanity and from the dictates of public conscience".[610] The function of the clause is generally seen as providing residual protection in cases not covered by a specific rule.[611]

174. The Nuremberg Tribunal confirmed the legal significance of the Martens Clause and emphasized that it was "much more than a pious declaration. It is a general clause, making the usages established among civilised nations, the laws of humanity and the dictates of public conscience into the legal yardstick to be applied if and when the specific provisions of the Convention and the Regulations annexed to it do not cover specific cases occurring in warfare, or concomitant to warfare".[612] The International Court of Justice has stated that the clause itself forms part of customary international law.[613] While originally conceived in the context of belligerent occupation, the clause has today a broader application, covering all areas of the law of armed conflict.[614]

175. The Martens Clause was referred to by the International Court of Justice in its advisory opinion on the *Legality of Nuclear Weapons* to strengthen the argument about the applicability of international humanitarian law to nuclear weapons.[615] Similarly, the ICRC commentary to Geneva Convention I mentioned, as a dynamic aspect of the clause, that it confirms "the application of the principles and rules of humanitarian law to new situations or to developments in technology, also when those are not, or not specifically, addressed in treaty law".[616] The clause thus prevents the

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general overview, see memorandum by the Secretariat on the effect of armed conflicts on treaties: an examination of practice and doctrine (A/CN.4/550), paras. 140–142.

[607] Geneva Convention I, art. 63; Geneva Convention for the Amelioration of the Condition of Wounded, Sick and Shipwrecked Members of Armed Forces at Sea (Geneva, 12 August 1949), United Nations, *Treaty Series*, vol. 75, No. 971, p. 85 (Geneva Convention II), art. 62; Geneva Convention relative to the Treatment of Prisoners of War (Geneva, 12 August 1949), *ibid.*, No. 972, p. 135 (Geneva Convention III), art. 142; Geneva Convention IV, art. 158.

[608] Additional Protocol II, preambular paragraph 4.

[609] Convention on Prohibitions or Restrictions on the Use of Certain Conventional Weapons Which May Be Deemed to Be Excessively Injurious or to Have Indiscriminate Effects (Geneva, 10 October 1980), United Nations, *Treaty Series*, vol. 1342, No. 22495, p. 137, preambular paragraph 5.

[610] Para. (3) of the commentary to art. 29 of the articles on the law of the non-navigational uses of international watercourses with commentaries and resolution on transboundary confined groundwater, *Yearbook … 1994*, vol. II (Part Two), at p. 131; para. (3) of the commentary to art. 18 of the articles on the law of transboundary aquifers, *Yearbook… 2008*, vol. II (Part Two), paras. 53–54, at p. 43.

[611] Para. (3) of the commentary to art. 29 of the articles on the law of the non-navigational uses of international watercourses with commentaries and resolution on transboundary confined groundwater, *Yearbook … 1994*, vol. II (Part Two), at p. 131: "In cases not covered by a specific rule, certain fundamental protections are afforded by the 'Martens clause'".

[612] *Farben* and *Krupp* cases (footnote 350 above)

[613] *Legality of the Threat or Use of Nuclear Weapons* (footnote 460 above), p. 259, para. 84.

[614] T. Meron, "The Martens Clause, principles of humanity, and dictates of public conscience", *American Journal of International Law*, vol. 94 (2000), pp. 78–89, at p. 87.

[615] "Finally, the Court points to the Martens Clause, whose continuing existence and applicability is not to be doubted, as an affirmation that the principles and rules of humanitarian law apply to nuclear weapons." *Legality of the Threat or Use of Nuclear Weapons* (footnote 460 above), p. 260, para. 87.

[616] ICRC commentary (2016) to Geneva Convention I, art. 63 para. 3298. See also C. Greenwood, "Historical development and legal basis", in D. Fleck (ed.), *Handbook of International Humanitarian Law*, 3rd ed. (Oxford, Oxford University Press, 2008), pp. 33–34, at p. 34: "as new weapons and launch systems continue to be developed, incorporating ever more

argument that any means or methods of warfare that are not explicitly prohibited by the relevant treaties[617] are permitted, or, in a more general manner, that acts of war not expressly addressed by treaty law or customary international law are *ipso facto* legal.[618]

176. Further than that, however, views differ as to the legal consequences of the Martens Clause. It has been seen as a reminder of the role of customary international law in the absence of applicable treaty law, and of the continued validity of customary law beside treaty law,[619] an interpretation that does not give the clause much independent content. Moreover, the Martens Clause has been accorded a role in the interpretation of customary or treaty rules of international humanitarian law. It has thus been submitted that "considerations of humanity" and "dictates of public conscience" provide additional interpretative guidance "whenever the legal regulation provided by a treaty or customary rule is doubtful, uncertain or lacking in clarity".[620] Furthermore, the Martens Clause has been seen to support a method of identifying customary international law in which particular emphasis is given to *opinio juris* while the requirement of State practice is loosened.[621] The latter interpretation receives some support from the jurisprudence of the International Tribunal for the Former Yugoslavia, which has contributed considerably to the convergence of the legal regimes applicable to international and non-international armed conflicts.[622]

177. Closely related to the concept of "principles of humanity" as a component of the Martens Clause is the notion of "elementary considerations of humanity",[623] which has been consistently used by the International Court of Justice and other international courts in the sense of a legal principle.[624] The International Tribunal for

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sophisticated robotic and computer technology, the venerable Martens Clause will ensure that the technology will not outpace the law."

[617] ICRC commentary (1987) to Additional Protocol I, art. 1, para. 55; ICRC commentary (2016) to Geneva Convention I, art. 63, para. 3297.

[618] According to the German Military Manual, "[i]f an act of war is not expressly prohibited by international agreements or customary law, this does not necessarily mean that it is actually permissible". See Federal Ministry of Defence, *Humanitarian Law in Armed Conflicts – Manual*, para. 129 (ZDv 15/2, 1992).

[619] C. Greenwood, "Historical development and legal basis" (footnote 616 above), p. 34. See also the ICRC commentary 2016) to Geneva Convention I, art. 63, para. 3296, which characterizes this as the minimum content of the clause.

[620] A. Cassese, "The Martens Clause: half a loaf or simply pie in the sky?", *European Journal of International Law*, vol. 11 (2000), pp. 187–216, at pp. 212–213; G. Distefano and E. Henry, "Final provisions, including the Martens Clause", in A. Clapham, P. Gaeta and M. Sassòli (eds.), *The 1949 Geneva Conventions: A Commentary* (Oxford, Oxford University Press, 2015), pp. 155–188, at pp. 185–186. See also *Prosecutor v. Kupreškić et al.*, Case No. IT-95-16-T, Judgment, 14 January 2000, paras. 525 and 527.

[621] Cassese, "The Martens Clause: half a loaf or simply pie in the sky?" (previous footnote), p. 214; and Meron, "The Martens Clause, principles of humanity, and dictates of public conscience" (footnote 614 above), p. 88.

[622] Sivakumaran, *The Law of Non-International Armed Conflict* (footnote 186 above), pp. 58 *et seq*. See also *Tadić*, Decision (footnote 212 above), para. 119.

[623] According to Meron ("The Martens Clause, principles of humanity, and dictates of public conscience" (footnote 614 above), p. 82), "[p]rinciples of humanity are not different from elementary considerations of humanity". See also ICRC commentary (2016) to Geneva Convention I, art. 63, para. 3291.

[624] *Responsabilité de l'Allemagne à raison des dommages causés dans les colonies portugaises du sud de l'Afrique*, 31 July 1928, UNRIAA vol. II, pp. 1011–1033, at p. 1026; *Corfu Channel case, Judgment of April 9th, 1949, I.C.J. Reports 1949*, p. 4, at p. 22; *Military and Paramilitary Activities* (footnote 460 above), pp. 113–114, para. 218; and *Prosecutor v. Milan Martić*, Case No. IT-95-11-R61, Review of the Indictment Pursuant to Rule 61 of the Rules of Procedure and Evidence, Trial Chamber, International Tribunal for the Former Yugoslavia, 8 March 1996, *Judicial Reports 1996*, p. 519, at p. 527, para. 13. See also *Prosecutor v. Anto Furundžija*, Case

the Former Yugoslavia, in *Martić,* qualified "elementary considerations of humanity" as "the foundation of the entire body of international humanitarian law applicable to all armed conflicts" and in this sense equivalent to the "principles of humanity".[625] The *Corfu Channel* case, however, by calling the notion "even more exacting in peace than in war", may have given it a broader application, notably extending it beyond situations of armed conflict.[626] In this sense, the phrase "principles of humanity" can be taken to refer more generally to humanitarian standards found not only in international humanitarian law but also in international human rights law.[627]

178. "Dictates of public conscience" is another essential component of the Martens Clause. It bears some similarity to the reference to "atrocities that deeply shock the conscience of humanity" in the preamble to the Rome Statute of the International Criminal Court[628] in the sense that neither notion has a clear relationship to the established sources of international law. Both, furthermore, are connected with such broader notions as "public opinion" and "world opinion", an aspect that has been seen as problematic.[629] Cassese has proposed a pragmatic approach to the interpretation of the term emphasizing that "'demands of public conscience' ought to be ascertained by taking into account resolutions and other authoritative acts of representative international bodies".[630] Such materials are not without legal significance and may also contribute to the formation of customary international law.[631] In addition, the term "public conscience" emphasizes the ethical basis of the Martens Clause[632] and cannot be reduced to the prevailing public opinion.

179. The "dictates of public conscience" and the Martens Clause as a whole have often been invoked in the context of the protection of the environment in armed conflict.[633] The ICRC Guidelines on the Protection of the Environment in Armed

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No. IT-95-17/I-T, Judgment, Trial Chamber, International Tribunal for the Former Yugoslavia, 10 December 1998, *Judicial Reports 1998*, p. 467, at p. 557, para. 137.

[625] *Martić* (previous footnote), at p. 527, para. 13.

[626] *Corfu Channel case* (footnote 624 above), at p. 22. See also P.M. Dupuy, "Les 'considérations élémentaires d'humanité' dans la jurisprudence de la Cour Internationale de Justice", in L. A. Sicilianos and R.J. Dupuy (eds.), *Mélanges en l'honneur de Nicolas Valticos: Droit et justice* (Paris, Pedone, 1999), pp. 117–130.

[627] Cassese ("The Martens Clause: half a loaf or simply pie in the sky?" (footnote 620 above), p. 212) refers to "general standards of humanity" as deduced from international human rights standards.

[628] Rome Statute, second preambular paragraph. The preamble articulates the purpose and vision of the International Criminal Court. See also, in this regard, *Situation in the Democratic Republic of the Congo*, Case No. ICC-01/04, Judgment on the Prosecutor's Application for Extraordinary Review of Pre-Trial Chamber I's 31 March 2006 Decision Denying Leave to Appeal, Appeals Chamber, International Criminal Court, 13 July 2006, para. 33.

[629] E. Wilmshurst, "Conclusions", in Wilmshurst and S. Breau (eds.), *Perspectives on the ICRC Study on Customary International Humanitarian Law* (Cambridge, Cambridge University Press, 2007), pp. 401–413, at p. 412.

[630] Cassese, "The Martens Clause: half a loaf or simply pie in the sky?" (footnote 620 above), p. 212.

[631] Draft conclusion 4, and the commentary thereto, of the draft conclusions on the identification of customary international law, adopted on second reading, *Official Records of the General Assembly, Seventy-third Session, Supplement No. 10* (A/73/10), para. 66, at pp. 130–132.

[632] R. Sparrow, "Ethics as a source of law: the Martens Clause and autonomous weapons", ICRC, Humanitarian Law and Policy blog, 14 November 2017.

[633] See Sands *et al*., *Principles of International Environmental Law*, 4th ed. (footnote 312 above), p. 832: "In modern international law, there is no reason why [the dictates of public conscience] should not encompass environmental protection". See also M. Bothe *et al.*, "International law protecting the environment during armed conflict: gaps and opportunities", *International Review of the Red Cross*, vol. 92 (2010), pp. 569–592, at pp. 588–589; C. Droege and M.L. Tougas, "The protection of the natural environment in armed conflict: existing rules and need for further legal protection", *Nordic Journal of International Law*, vol. 82, 2013, pp. 21–52, at pp. 39-40; and

Conflict also include a provision stating the following: “In cases not covered by international agreements, the environment remains under the protection and authority of the principles of international law derived from established custom, the principles of humanity and the dictates of public conscience.”[634] In 1994, the General Assembly invited all States to disseminate the revised guidelines widely and to “give due consideration to the possibility of incorporating them into their military manuals and other instructions addressed to their military personnel”.[635] The World Conservation Congress of 2000, furthermore, urged Member States to endorse a policy reading as follows:

> Until a more complete international code of environmental protection has been adopted, in cases not covered by international agreements and regulations, the biosphere and all its constituent elements and processes remain under the protection and authority of the principles of international law derived from established custom, from dictates of the public conscience, and from the principles and fundamental values of humanity acting as steward for present and future generations.[636]

The recommendation was adopted by consensus[637] and was meant to apply during peacetime as well as during armed conflicts.[638]

180. The Commission, too, has referred to the Martens Clause in the context of environmental protection in its commentaries to the law of non-navigational uses of international watercourses, as well as in the commentaries to the draft articles on transboundary aquifers.[639] In the context of the present topic, it has been pointed out that the Martens Clause is of an overarching character and therefore relevant to all three phases of the conflict cycle.[640]

181. It has sometimes been argued that the objective of the Martens Clause relates to the protection of human beings and that it could only have a role with regard to norms with a humanitarian character.[641] It is not clear, however, that the Clause gives rise to such a conclusion. The references to “principles of international law” and “dictates of public conscience” are general and not intrinsically limited to one specific meaning. Even more importantly, humanitarian and environmental concerns are not mutually exclusive. Modern definitions of the environment as an object of protection do not draw a strict dividing line between the environment and human activities but encourage definitions that include components of both.[642] As the International Court of Justice memorably stated: “the environment is not an abstraction but represents the

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M. Tignino, “Water during and after armed conflicts: what protection in international law?”, Brill Research Perspectives in International Water Law, vol. 1.4 (2016), pp. 1–111, at pp. 26, 28 and 41.

634 ICRC, “Guidelines for military manuals and instructions on the protection of the environment in times of armed conflict” (footnote 604 above), guideline 7.

635 General Assembly resolution 49/50 of 9 December 1994, para. 11.

636 World Conservation Congress resolution 2.97, entitled “A Martens Clause for environmental protection” (Amman, 4–11 October 2000).

637 The United States did not join the consensus.

638 D. Shelton and A. Kiss, “Martens Clause for environmental protection”, *Environmental Policy and Law*, vol. 30, No. 6 (2000), pp. 285–286, at p. 286.

639 See footnote 610 above.

640 Second report of Ms. Jacobsson (A/CN.4/685), para. 146.

641 See, e.g., Dam-de Jong, *International Law and Governance of Natural Resources in Conflict and Post-Conflict Situations* (footnote 111 above), p. 250.

642 See paras. 194–197 below. C.R. Payne, “Defining the environment: environmental integrity”, *in* Stahn, Iverson and Easterday (eds.), *Environmental Protection and Transitions from Conflict to Peace* (footnote 111 above), pp. 40–70, at p. 69, calls for a consideration of “how human activities and environment function as an interactive system”, not focusing exclusively on one element.

living space, the quality of life and the very health of human beings, including generations unborn".[643]

182. The contemporary relevance of the Martens Clause is related to circumstances in which treaty law is insufficient or non-existent. The reference to "dictates of public conscience", in particular, underscores the importance of an evolutionary reading of the rules of international humanitarian law. It can also be said that, by virtue of the Martens Clause, "international humanitarian law itself recognises that its treaties are not comprehensive and that, as a discipline, it cannot be insulated from developments occurring in other fields of international law".[644] This aspect bears particular relevance in the area of environmental protection, given that the understanding of the environmental impacts of conflict has developed considerably since the adoption of the treaties codifying the law of armed conflict. In particular, the ethos of international environmental law goes beyond bilateralism, as is evident from the concept of "common concern of humankind",[645] and the commitment to equity with future generations.[646]

183. The Martens Clause thus gives additional support to the approach to the present topic, in particular the taking into account of relevant rules and principles of international human rights law and international environmental law to inform the interpretation of the law of armed conflict with a view to enhancing the protection of the environment.

C. Proposed draft principles

184. In the light of the above, the following draft principles are proposed:

Draft principle 13 *bis*

Environmental modification techniques

Military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to another State is prohibited.

Draft principle 8 *bis*

Martens Clause

In cases not covered by international agreements, the environment remains under the protection and authority of the principles of international law derived from established custom, the principles of humanity and the dictates of public conscience in the interest of present and future generations.

D. Use of terms

[643] *Legality of the Threat or Use of Nuclear Weapons* (footnote 460 above), p. 241, para. 29.

[644] I. Scobbie, "The approach to customary international law in the Study", in Wilmshurst and Breau (eds.), *Perspectives on the ICRC Study on Customary International Humanitarian Law* (footnote 629 above), pp. 15–49, at p. 18.

[645] See, e.g., Convention on Biological Diversity, preamble, para. 3: "Affirming that the conservation of biological diversity is a common concern of humankind".

[646] General Assembly resolution 70/1 of 25 September 2015, entitled "Transforming our world: the 2030 Agenda for Sustainable Development", preamble: "We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations."

185. The way in which the different terms have been used in the draft principles has not raised discussion apart from two questions, which have been commented on occasionally in the Commission and in the Sixth Committee. The first question is whether the notion of "the environment" should be defined for the purposes of the topic. It is recalled that the first Special Rapporteur provided a tentative definition of "the environment" in her preliminary report.[647] The purpose of the tentative definition was to facilitate discussion on key terms; it served as a working definition of the environment[648] while the option of not defining the concept at all was maintained.[649] The second question is related to the need to harmonize the use of terms in view of the difference between Parts One, Three and Four, which use the term "the environment", and Part Two, which, in alignment with the language of Additional Protocol I to the Geneva Conventions, refers to "the natural environment". The Commission has agreed to revisit at a later stage whether "the environment" or "the natural environment" is preferable for all or some of the draft principles.[650]

1. Definition of "the environment"

186. There is no agreed legal definition of "the environment" in international law. Notwithstanding the extensive development of international environmental law in recent decades, multilateral environmental agreements do not present a shared understanding of the concept of the environment.[651] Many do not contain a definition and where there are definitions, they differ in approach and are typically broad in nature. Some of the "definitions" do not aim to define "the environment" but rather describe its elements in a non-exhaustive manner.

187. Among the first attempts to define "the environment", the 1972 Stockholm Declaration enumerates "natural resources of the earth, including the air, water, land, flora and fauna and especially representative samples of natural ecosystems".[652] The 1982 World Charter for Nature includes a general principle requiring that "the population levels of all life forms, wild and domesticated, must be at least sufficient for their survival, and to this end necessary habitats shall be safeguarded" and in "[a]ll areas of the earth".[653] The United Nations Environment Programme Expert Group established in the 1990s to assist the United Nations Compensation Commission presented a broad definition of the "environment" as consisting of "abiotic and biotic components, including air, water, soil, flora, fauna and the ecosystem formed by their interaction".[654] In comparison, the United Nations Environment Programme 2010 Guidelines on liability, response action and compensation for damage caused by activities dangerous to the environment do not give a definition to the "environment" but only to the term "environmental damage".[655]

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[647] A/CN.4/674 and Corr.1, para. 86.

[648] *Ibid.*, para. 68; and A/CN.4/700, para. 27.

[649] A/CN.4/674 and Corr.1, para. 84.

[650] Draft principle 1, asterisk, *Official Records of the General Assembly, Seventy-first Session, Supplement No. 10* (A/71/10), para. 189, at. p. 322.

[651] D. Bodansky, *The Art and Craft of International Environmental Law* (Cambridge, Massachusetts, Harvard University Press, 2010), p. 9. On multilateral environmental agreements that define the environment, see P. Sands, *Principles of International Environmental Law*, 2nd ed. (Cambridge, Cambridge University Press, 2003), pp. 16–17.

[652] Principle 2.

[653] General Assembly resolution 37/7 of 28 October 1982, annex, paras. 2–3.

[654] A. Timoshenko (ed.), "Conclusions by the Working Group of Experts on liability and compensation for environmental damage arising from military activities", in Timoshenko (ed.), *Liability and Compensation for Environmental Damage: Compilation of Documents* (UNEP, 1998), para. 31.

[655] Guidelines for the development of domestic legislation on liability, response action and compensation for damage caused by activities dangerous to the environment, adopted by the

188. In addition to these more general approaches to the concept of "the environment", some multilateral environmental agreements employ a specific definition reflecting the particular environmental issues addressed by the instrument. For instance, the 1992 United Nations Framework Convention on Climate Change defines "adverse effects of climate change" as "changes in the physical environment or biota resulting from climate change which have significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems or on the operation of socio-economic systems or on human health and welfare" .[656] The 1998 Aarhus Convention contains a detailed description of the different components of the environment. The Convention defines "environmental information" as any information on:

(a) The state of elements of the environment, such as air and atmosphere, water, soil, land, landscape and natural sites, biological diversity and its components, including genetically modified organisms, and the interaction among these elements;

(b) Factors, such as substances, energy, noise and radiation, and activities or measures, including administrative measures, environmental agreements, policies, legislation, plans and programmes, affecting or likely to affect the elements of the environment within the scope of subparagraph (a) above, and cost-benefit and other economic analyses and assumptions used in environmental decision-making;

(c) The state of human health and safety, conditions of human life, cultural sites and built structures, inasmuch as they are or may be affected by the state of the elements of the environment or, through these elements, by the factors, activities or measures referred to in subparagraph (b) above.[657]

The definitions included in particular instruments may nevertheless have little relevance outside the specific context of each instrument.[658]

189. Furthermore, the environment may be defined in terms of ecosystem services, such as habitats or watersheds, emphasizing the linkages between living and non-living, interdependent systems.[659] As an example, the United Nations Environment Programme defines the environment in the context of its work on disasters and conflicts as follows:

> The sum of all external conditions affecting the life, development and survival of an organism … [E]nvironment refers to the physical conditions that affect natural resources (climate, geology, hazards) and the ecosystem services that sustain them (e.g. carbon, nutrient and hydrological cycles).[660]

190. Within the European Union, the first Environment Action Programmes of the European Commission defined the environment as "the combination of elements whose complex interrelationships make up the settings, the surroundings and the conditions of life of the individual and of society, as they are and as they are felt".[661] Today, a high level of environmental protection is one of the underlying objectives of

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Governing Council of the United Nations Environment Programme on 26 February, 2010, decision SS.XI/5 B, annex, guideline 3 (f), contained in *Official Records, Sixty-fifth Session, Supplement No. 25* (A/65/25), annex I.

[656] United Nations Framework Convention on Climate Change (New York, 9 May 1992), United Nations, *Treaty Series*, vol. 1771, No. 30822, p. 107, art. 1.

[657] Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, art. 2, para. 3.

[658] P.-M. Dupuy and J.E. Vinũales, *International Environmental Law,* 2nd ed. (Cambridge, Cambridge University Press, 2018), p. 30.

[659] Payne, "Defining the environment …" (footnote 642 above).

[660] See, e.g., United Nations Environment Programme, *Protecting the Environment During Armed Conflict. An Inventory and Analysis of International Law* (Nairobi, 2009), p. 56.

[661] A. Gilpin, *Dictionary of Environmental Law* (Cheltenham, Edward Elgar, 2000), p. 92.

the European Union policy on the environment, but the founding treaties[662] of the European Union do not contain a definition of the environment. Most of the regulations, directives and decisions (secondary legislation) also leave the concept undefined, with some exceptions. For example, the regulation on placing plant protection products on the market defines the environment as "waters (including ground, surface, transitional, coastal and marine), sediment, soil, air, land, wild species of fauna and flora, and any interrelationship between them, and any relationship with other living organisms". [663] Some substantive framework directives[664] contain a reference to "a high level of protection of the environment as a whole",[665] underlining an integrated approach to environmental protection that is not dependent on an enumeration of its different components. The "environment" has been acknowledged in European Union environmental law and policy as an "all-embracing" concept, including in its legal context.[666]

191. In conclusion, the prevailing practice in international environmental instruments seems to be either to refrain from defining the concept of the environment at all,[667] or to just refer to it in broad terms or in a limited context of a particular instrument. [668] The concept of the "environment" does not have a generally accepted usage as a term in international law and definitions of the concept vary both in their scope and content.[669]

192. Not only is there is no agreed definition of the "environment" in international law, it is also an elusive concept that reacts and adapts to the increased knowledge of the elements of the environment and their mutual interaction. The environment itself, furthermore, is constantly changing, both because of human influence and of natural environmental changes.[670] As a concept, "the environment" requires science for its development, [671] which reduces the usefulness of fixed definitions. [672] Human understanding of what constitutes an environmental problem has evolved

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[662] Treaty on the Functioning of the European Union (26 October 2012), *Official Journal of the European Union*, C 326, p. 47; Treaty on European Union (26 October 2012), *ibid.*, p. 13.

[663] Regulation (EC) No. 1107/2009 of the European Parliament and of the Council of 21 October 2009 concerning the placing of plant protection products on the market and repealing Council Directives 79/117/EEC and 91/414/EEC (24 November 2009), *Official Journal of the European Union*, L 309, p. 1, art. 3, para. 13.

[664] Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (Directive on Integrated Pollution Prevention and Control), *Official Journal of the European Union*, L 334, p. 17; Directive 2000/60/EC of the European Parliament and of the Council of 23 October 2000 establishing a framework for Community action in the field of water policy (Water Framework Directive), *Official Journal of the European Union*, L 327, p. 1.

[665] See, e.g., preambular paragraphs 12 and 44 and articles 1, 15 and 73 of the Directive on Integrated Pollution Prevention and Control and control, and articles 2 and 11 of the Water Framework Directive.

[666] L. Krämer, *EU Environmental Law,* 8th ed. (London, Sweet and Maxwell, 2016), pp. 1–2.

[667] For example, although not a legally binding instrument, the 2030 Agenda for Sustainable Development including the 17 Sustainable Development Goals does not define the concept. General Assembly resolution 70/1 of 25 September 2015.

[668] Gilpin, *Dictionary of Environmental Law* (footnote 661 above), p. 92.

[669] Dupuy and Vinũales, *International Environmental Law* (footnote 658 above), p. 28; Sands *et al.*, *Principles of International Environmental Law*, 4th ed. (footnote 312 above), p. 16.

[670] A. Goudie, *The Nature of the Environment*, 4th ed. (Oxford, Blackwell, 2001), p. 503.

[671] G. J. MacDonald, "Environment: evolution of a concept", *Journal of Environment and Development*, vol. 12, (2003), pp. 151–176. Most of the key developments in international environmental law have their origin in science. On this, see Bodansky, *The Art and Craft of International Environmental Law* (footnote 651 above), p. 19.

[672] Payne, "Defining the environment …" (footnote 642 above), p. 41. See also K. Mollard Bannelier, *La Protection de l'Environnement en Temps de Conflit Armé* (Paris, Pedone, 2001), pp. 20–22.

considerably over the past decades, as has the challenge of defining exactly what is protected as the "environment". This challenge has been recognized in the Commission's earlier work on the topic: "[s]ince knowledge of the environment and its eco-systems is constantly increasing, better understood and more widely accessible to humans, it means that environmental considerations cannot remain static over time, they should develop as human understanding of the environment develops".[673]

193. In the light of the above, it is proposed that no definition of the term "the environment" be included in the set of draft principles. It is also recalled that the Commission has not defined the environment, even though the concept is frequently used, in the articles on the law on the non-navigational uses of international watercourses. The same holds true for the articles on the law of transboundary aquifers.[674]

2. Harmonization of the use of terms

194. Of the treaties directly relevant to the protection of the environment in relation to armed conflicts, Additional Protocol I to the Geneva Conventions of 1949 (as well as the Rome Statute of the International Criminal Court) uses the term "the natural environment".[675] The Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques for its part refers to "environmental modification techniques" as "any technique for changing – through the deliberate manipulation of natural processes – the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space".[676] None of these instruments defines the concept of the "natural environment" or "the environment". The ICRC commentary to Additional Protocol I clarifies that the concept of the "natural environment" refers to a "system of inextricable interrelations between living organisms and their inanimate environment", whereas effects on the "human environment" are understood as effects on "external conditions and influences which affect the life, development and the survival of the civilian population and living organisms".[677] The "natural environment" is thus distinguished from the "human environment". However, in the context of article 55 on the protection of the natural environment, the commentary notes that the concept of natural environment "should be understood in the widest sense to cover the biological environment in which a population is living".[678]

195. The World Charter for Nature stated that "[m]ankind is a part of nature and life depends on the uninterrupted functioning of natural systems".[679] Several courts and tribunals have explicitly recognized the interdependence between human beings and the environment by affirming that environmental harm affects the right to life.[680] As

[673] Para. (5) of the commentary to draft principle 11 [II-3], *Official Records of the General Assembly, Seventy-first Session, Supplement No. 10* (A/71/10), para. 189, at p. 336.

[674] First report of Ms. Jacobsson (A/CN.4/674 and Corr.1), paras. 84–85.

[675] Additional Protocol I, arts. 35, para. 3 and 55, and Rome Statute art. 8, para. 2 (*b*) (iv).

[676] Art. II.

[677] ICRC commentary (1987) to Additional Protocol I, art. 36, para. 1451.

[678] *Ibid*., art. 55, para. 2126.

[679] General Assembly resolution 37/7 of 28 October 1982, annex, preamble: "Aware that (a) "[m]ankind is a part of nature and life depends on the uninterrupted functioning of natural systems which ensure the supply of energy and nutrients". The understanding of the natural systems and ecosystem services indispensable for human life has evolved since the adoption of the Charter.

[680] *Socio-economic Rights and Accountability Project (SERAP) v. Nigeria*, Judgment No. ECW/CCJ/JUD/18/12, Community Court of Justice, Economic Community of West African States, 14 December 2012; *Öneryildiz v. Turkey*, Application No. 48939/99, Judgment, European Court of Human Rights, 30 November 2004, ECHR 2004-XII, para. 71; *Yanomami v. Brazil*, Case No. 12/85, Inter-American Commission on Human Rights, resolution No. 12/85, Case No. 7615,

the most recent such ruling, the advisory opinion of the Inter-American Court of Human Rights *Medio Ambiente y Derechos Humanos* established that there is an inalienable relationship between human rights and environmental protection.[681]

196. International environmental law is comprised of substantive, procedural and institutional norms that have as their primary objective the protection of the *environment*.[682] International environmental law focuses centrally on interactions between humans and the natural world (the air, water, soil, fauna and flora) and presupposes a separation between humans and the nature. The concept of the environment, however, encompasses "both the features and the products of the natural world and those of human civilization".[683] According to this approach, the concept of "the environment" is broader than, and includes the notion of "the nature" which is usually "seen to be concerned *only* with features of the natural world itself".[684] Recent research also underlines the need to consider human activities and the environment as an interactive system instead of focusing exclusively on one element.[685] The environment thus represents a complex system of interconnections where the factors involved (such as humans and the natural environment) interact with each other in different ways that "do not permit them to be treated as discrete".[686]

197. In the light of the above, it is proposed to use the term "the environment" consistently in all draft principles. An explanation may need to be added to the general commentary making it clear that this choice is only for the purposes of the present draft principles and without prejudice to how Additional Protocol I is applied and interpreted.

VI. Future work

198. It is the hope of the Special Rapporteur that the present report will lay the basis for finalizing the Commission's work on the topic, so that a complete set of draft principles together with the accompanying commentaries could be adopted on first reading during the seventy-first session of the Commission.

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[681] Inter-American Court of Human Rights, Advisory Opinion No. OC 23-17, *Medio Ambiente y Derechos Humanos* [The environment and human rights], 15 November 2017, Series A, No. 23.

[682] Sands *et al.*, *Principles of International Environmental Law*, 4th ed. (footnote 312 above), p. 14.

[683] *Ibid*.

[684] *Ibid*. (emphasis added).

[685] Payne, "Defining the environment …" (footnote 642 above), pp. 65–70.

[686] Sands *et al.*, *Principles of International Environmental Law*, 4th ed. (footnote 312 above), p. 5.

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Annex I

Consolidated list of draft principles that have been provisionally adopted either by the Commission or by the Drafting Committee[687]

Draft principles on protection of the environment in relation to armed conflicts

Draft principle 1
Scope

The present draft principles apply to the protection of the environment before, during or after an armed conflict.

Draft principle 2
Purpose

The present draft principles are aimed at enhancing the protection of the environment in relation to armed conflict, including through preventive measures for minimizing damage to the environment during armed conflict and through remedial measures.

[…]

Part One

General principles

Draft principle 4
Measures to enhance the protection of the environment

1. States shall, pursuant to their obligations under international law, take effective legislative, administrative, judicial and other measures to enhance the protection of the environment in relation to armed conflict.

2. In addition, States should take further measures, as appropriate, to enhance the protection of the environment in relation to armed conflict.

Draft principle 5 [I-(x)]
Designation of protected zones

States should designate, by agreement or otherwise, areas of major environmental and cultural importance as protected zones.

Draft principle 6
Protection of the environment of indigenous peoples

1. States should take appropriate measures, in the event of an armed conflict, to protect the environment of the territories that indigenous peoples inhabit.

2. After an armed conflict that has adversely affected the environment of the territories that indigenous peoples inhabit, States should undertake effective consultations and cooperation with the indigenous peoples concerned, through appropriate procedures and in particular through their own representative institutions, for the purpose of taking remedial measures.

[687] Draft principles provisionally adopted by the Drafting Committee, and which the Commission took note of at its seventieth session, are in italics.

Draft principle 7
Agreements concerning the presence of military forces in relation to armed conflict

States and international organizations should, as appropriate, include provisions on environmental protection in agreements concerning the presence of military forces in relation to armed conflict. Such provisions may include preventive measures, impact assessments, restoration and clean-up measures.

Draft principle 8
Peace operations

States and international organizations involved in peace operations in relation to armed conflict shall consider the impact of such operations on the environment and take appropriate measures to prevent, mitigate and remediate the negative environmental consequences thereof.

Part Two

Principles applicable during armed conflict

Draft principle 9 [II-1]
General protection of the natural environment during armed conflict

1. The natural environment shall be respected and protected in accordance with applicable international law and, in particular, the law of armed conflict.

2. Care shall be taken to protect the natural environment against widespread, long-term and severe damage.

3. No part of the natural environment may be attacked, unless it has become a military objective.

Draft principle 10 [II-2]
Application of the law of armed conflict to the natural environment

The law of armed conflict, including the principles and rules on distinction, proportionality, military necessity and precautions in attack, shall be applied to the natural environment, with a view to its protection.

Draft principle 11 [II-3]
Environmental considerations

Environmental considerations shall be taken into account when applying the principle of proportionality and the rules on military necessity.

Draft principle 12 [II-4]
Prohibition of reprisals

Attacks against the natural environment by way of reprisals are prohibited.

Draft principle 13 [II-5]
Protected zones

An area of major environmental and cultural importance designated by agreement as a protected zone shall be protected against any attack, as long as it does not contain a military objective.

Part Three

Principles applicable after an armed conflict

Draft principle 14
Peace processes

1. Parties to an armed conflict should, as part of the peace process, including where appropriate in peace agreements, address matters relating to the restoration and protection of the environment damaged by the conflict.

2. Relevant international organizations should, where appropriate, play a facilitating role in this regard.

Draft principle 15
Post-armed conflict environmental assessments and remedial measures

Cooperation among relevant actors, including international organizations, is encouraged with respect to post-armed conflict environmental assessments and remedial measures.

Draft principle 16
Remnants of war

1. After an armed conflict, parties to the conflict shall seek to remove or render harmless toxic and hazardous remnants of war under their jurisdiction or control that are causing or risk causing damage to the environment. Such measures shall be taken subject to the applicable rules of international law.

2. The parties shall also endeavour to reach agreement, among themselves and, where appropriate, with other States and with international organizations, on technical and material assistance, including, in appropriate circumstances, the undertaking of joint operations to remove or render harmless such toxic and hazardous remnants of war.

3. Paragraphs 1 and 2 are without prejudice to any rights or obligations under international law to clear, remove, destroy or maintain minefields, mined areas, mines, booby-traps, explosive ordnance and other devices.

Draft principle 17
Remnants of war at sea

States and relevant international organizations should cooperate to ensure that remnants of war at sea do not constitute a danger to the environment.

Draft principle 18
Sharing and granting access to information

1. To facilitate remedial measures after an armed conflict, States and relevant international organizations shall share and grant access to relevant information in accordance with their obligations under international law.

2. Nothing in the present draft principle obliges a State or international organization to share or grant access to information vital to its national defence or security. Nevertheless, that State or international organization shall cooperate in good faith with a view to providing as much information as possible under the circumstances.

Part Four
Principles applicable in situations of occupation

Draft principle 19
General obligations of an Occupying Power

1. An Occupying Power shall respect and protect the environment of the occupied territory in accordance with applicable international law and take environmental considerations into account in the administration of such territory.

2. An Occupying Power shall take appropriate measures to prevent significant harm to the environment of the occupied territory that is likely to prejudice the health and well-being of the population of the occupied territory.

3. An Occupying Power shall respect the law and institutions of the occupied territory concerning the protection of the environment and may only introduce changes within the limits provided by the law of armed conflict.

Draft principle 20
Sustainable use of natural resources

To the extent that an Occupying Power is permitted to administer and use the natural resources in an occupied territory, for the benefit of the population of the occupied territory and for other lawful purposes under the law of armed conflict, it shall do so in a way that ensures their sustainable use and minimizes environmental harm.

Draft principle 21
Due diligence

An Occupying Power shall exercise due diligence to ensure that activities in the occupied territory do not cause significant harm to the environment of areas beyond the occupied territory.

Annex II

Proposed draft principles

Part One

Draft principle 6 *bis*

Corporate due diligence

States should take necessary legislative and other measures to ensure that corporations registered or with seat or centre of activity in their jurisdiction exercise due diligence and precaution with respect to the protection of human health and the environment when operating in areas of armed conflict or in post-conflict situations. This includes ensuring that natural resources are purchased and obtained in an equitable and environmentally sustainable manner.

Draft principle 8 *bis*

Martens Clause

In cases not covered by international agreements, the environment remains under the protection and authority of the principles of international law derived from established custom, the principles of humanity and the dictates of public conscience in the interest of present and future generations.

Part Two

Draft principle 13 *bis*

Environmental modification techniques

Military or any other hostile use of environmental modification techniques having widespread, long-lasting or severe effects as the means of destruction, damage or injury to another State is prohibited.

Draft principle 13 *ter*

Pillage

Pillage of natural resources is prohibited.

Part Three

Draft principle 13 *quater*

Responsibility and liability

1. These draft principles are without prejudice to the existing rules of international law on responsibility and liability of States.

2. When the source of environmental damage in armed conflict is unidentified, or reparation from the liable party unavailable, States should take appropriate measures to ensure that the damage does not remain unrepaired or uncompensated, and may consider the establishment of special compensation funds or other mechanisms of collective reparation for that purpose.

3. Damage to the environment for the purposes of reparation shall include damage to ecosystem services, if established, irrespective of whether the damaged goods and services were traded in the market or placed in economic use.

Draft principle 13 *quinques*

Corporate responsibility

1. States should take the necessary legislative and other measures to ensure that corporations registered or with seat or centre of activity in their jurisdiction can be held responsible for harm caused to human health and the environment in areas of armed conflict or in post-conflict situations. To this effect, States should provide adequate and effective procedures and remedies, which are also available for the victims of the corporate actions.

2. States should take the necessary legislative and other measures to ensure that, in cases of harm caused to human health and the environment in areas of armed conflict or in post-conflict situations, responsibility can be attributed to the corporate entities with *de facto* control of the operations. Parent companies are to be held responsible for ascertaining that their subsidiaries exercise due diligence and precaution.

Draft principle 14 *bis*

Human displacement

States and other relevant actors should take appropriate measures to prevent and mitigate environmental degradation in areas where persons displaced by conflict are located, while providing relief for such persons and local communities.