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Environmental impact of armed conflicts

Report[1]
Committee on Social Affairs, Health and Sustainable Development
Rapporteur: Mr John HOWELL, United Kingdom, European Conservatives Group and Democratic Alliance

Summary

Armed conflicts, wars and military aggression destroy human lives and damage human living space. Environmental damages can be multifaceted, severe, long-lasting and mostly irreversible. They affect not only ecosystems but also human health beyond the conflict area and long after the conflict is over. The human rights to life and to a healthy environment are thus undermined.

The report notes that the existing international legal framework provides for a limited protection of the environment in times of armed conflict based on international humanitarian law instruments. It highlights the need to ensure co-application of human rights and humanitarian law during armed conflicts. It also advocates for the international recognition of the crime of ecocide and measures to outlaw the use of prohibited weapons which have disastrous impact on both the environment and humans.

The report recommends steps to consolidate a legal framework for the enhanced protection of the environment in armed conflicts at national, European and international levels, notably for monitoring infringements and addressing compensation claims. Moreover, State responsibility for extraterritorial environmental damage should be strengthened, and a new regional legal instrument or treaty under the Council of Europe's auspices should be drafted.

1. Reference to committee: Doc. 15074, Reference 4506 of 7 May 2020.

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A. Draft resolution[2]

1. Armed conflicts, wars and military aggression destroy human lives and leave deep scars on human living space. Environmental damages resulting from armed conflicts can be multifaceted, severe, long-lasting and mostly irreversible. They not only harm natural habitats and ecosystems but can also affect human health well beyond the conflict area and long after the conflict is over. The human rights to life and to a healthy environment are thus undermined.

2. The existing international legal framework provides for direct and indirect protection of the environment in times of armed conflict to a certain extent, based on international humanitarian law instruments such as the United Nations Convention on the Prohibition of Military or Any Other Hostile Use of Environment Modification Techniques (ENMOD convention), and the Additional Protocol to the Geneva Conventions relating to the Protection of Victims of International Armed Conflicts (Protocol I). In addition, international law doctrine came to accept the interplay between international humanitarian law and international human rights law in the 1996 advisory opinion of the International Court of Justice on the "Legality of the Threat or Use of Nuclear Weapons". The Parliamentary Assembly notes that the co-application of human rights and humanitarian law during times of armed conflict has also been confirmed by the United Nations Human Rights Committee (via general comments) and the European Court of Human Rights (via case law).

3. The Assembly therefore considers that international human rights and humanitarian law imposes substantive and procedural obligations on States involved in armed conflicts. With the increased worldwide acceptance that the right to a healthy environment constitutes a human right, there are grounds to affirm that States may have extraterritorial obligations arising in and from armed conflicts.

4. The Assembly recalls that the norms of customary international law provide indirect protection of the environment during armed conflicts. To this end, it welcomes the Red Cross Guidelines for Military Manuals Instructions ("ICRC Guidelines") as updated in 2020 which contribute, practically and effectively, to raising awareness about the need for the protection of the natural environment against the impact of armed conflicts. However, the environment is thus protected only in an incidental manner, subordinated to wartime requirements, and conditioned on humanitarian imperatives.

5. The Assembly commends the work of the International Law Commission (ILC) of the United Nations on the draft principles on the protection of the environment in relation to armed conflicts. It welcomes the endorsement of these principles by the United Nations General Assembly on 7 December 2022 and encourages their widest possible dissemination across all European States and their global partners.

6. The Assembly notes that the Council of Europe has developed several legal instruments to protect the environment: the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment (ETS No. 150), the Convention on the Protection of Environment through Criminal Law (ETS No. 172), the Convention on the Conservation of European Wildlife and Natural Habitats (ETS No. 104, "Bern Convention") and the Landscape Convention (ETS No.176). However, these conventions either do not explicitly cover or explicitly exclude damage caused by an act of war or military hostilities. The currently ongoing revision of the criminal law convention (ETS No. 172), which is also open to non-member States, offers the possibility of establishing a new "ecocide" criminal offence at Council of Europe level. The Assembly also notes that the Committee of Ministers Recommendation CM/Rec(2022)20 on human rights and the protection of the environment, adopted on 27 September 2022, mentions "the environmental harm stemming from armed conflicts", reaffirms that "all human rights are universal, indivisible, interdependent and interrelated" and urges steps to recognise the right to a healthy environment at the national level as a human right.

7. Severe destruction or deterioration of nature that could be qualified as ecocide may occur in times of peace or war. It is necessary to codify this notion in both national legislation, as appropriate, and international law. The Assembly therefore strongly supports efforts to amend the Rome Statute of the International Criminal Court, so as to add ecocide as a new crime. It reiterates its call, contained in Resolution 2398 (2021) "Addressing issues of criminal and civil liability in the context of climate change", as regards the need for "recognising universal jurisdiction for ecocide and the most serious environmental crimes" and introducing "the crime of ecocide into […] national criminal legislation".

8. The Assembly deplores the fact that despite an impressive international legal arsenal, important gaps subsist in protecting the environment in the context of armed conflicts and their aftermath. The existing legal instruments lack universality in terms of ratifications, precision of terms used (such as for qualifying

2. Draft resolution adopted unanimously by the committee on 2 December 2022.

"widespread, long-lasting, or severe effects"), a comprehensive coverage of offences and a sufficiently broad scope of application. Moreover, a permanent international mechanism to monitor legal infringements and address compensation claims for environmental damage is also missing.

9. The Assembly urges Council of Europe member States to take all necessary measures to outlaw and prosecute the use of prohibited weapons in the course of armed conflicts that, among other ills, bring disproportionate environmental impact and render human life in the affected area impossible.

10. Considering that the Council of Europe has served as a laboratory of new legal developments to defend the values of human rights and the rule of law in Europe and beyond, the Assembly believes that the Organisation should take the lead in elaborating new legal instruments to guide member States and beyond in preventing massive environmental damage and reducing the scale of such damage as far as possible during armed conflicts and their aftermath. It should pave the way towards the international recognition of the crime of ecocide. With this in mind, and referring to the above considerations, the Assembly calls on the member States of the Council of Europe, as well as observer States and States whose parliament enjoys observer or partnership for democracy status with the Assembly to:

10.1. build and consolidate a legal framework for the enhanced protection of the environment in armed conflicts at national, European and international levels by:

10.1.1. ratifying the ENMOD convention and Protocol I to the Geneva Conventions relating to the Protection of Victims of International Armed Conflicts, if they have not yet done so;

10.1.2. taking steps to support the creation of a permanent international mechanism to monitor legal infringements and address compensation claims for environmental damage resulting from armed conflicts;

10.1.3. supporting practical implementation of the principles on the protection of the environment in relation to armed conflicts adopted by the United Nations General Assembly and promoting their dissemination through relevant domestic institutions, diplomatic channels and international stakeholders;

10.1.4. promoting a more coherent and comprehensive reading of the existing legal rules for protecting the environment in armed conflicts;

10.1.5. updating their legal arsenal to criminalise and effectively prosecute ecocide and taking concrete steps to amend the Rome Statute of the International Criminal Court in order to add ecocide as a new crime;

10.2. close gaps between different fields of law and the reality on the ground in order to adequately protect human living space, the environment, and human rights to life and to a healthy environment in the context of armed conflicts by:

10.2.1. strengthening State responsibility for environmental damage extending beyond their territorial limits, based on extraterritorial human rights obligations and the functional impact-model in situations where the impact is direct and reasonably foreseeable;

10.2.2. considering the drafting of a new regional legal instrument or treaty under the Council of Europe's auspices, with a view to clarifying and filling the gaps identified in the existing legal regime (notably regarding the damage threshold, enforcement, liability, and the due diligence principle);

10.2.3. conducting a study, under the auspices of the Council of Europe, on the possible interplay between existing international criminal law and environmental harm occurring during armed conflicts, in particular as regards the possibility to invoke existing war crimes;

10.2.4. actively participating in the revision process of the Council of Europe's convention No. 172 in order to ensure that the revised convention would apply also in the context of armed conflicts, wartime or occupation;

10.2.5. deploying sufficient means to ensure proper monitoring and implementation of commitments under the Council of Europe treaties, in particular the Bern Convention and the Landscape Convention;

10.2.6. ensuring that the relevant international legal framework is interpreted in a more open-ended manner, so as to offer more adequate protection of both the environment and human health;

10.2.7. mapping areas of particular environmental importance or sensitivity, based on existing protected areas (such as world natural heritage sites or natural reserves), in anticipation of any form of armed conflict, and foreseeing the demilitarisation of such areas in the case of a military conflict;

10.2.8. adapting national military manuals in the light of the updated ICRC Guidelines, the United Nations principles on the protection of the environment in relation to armed conflicts and the evolving international legal framework;

10.2.9. considering establishing domestic and/or regional solutions to provide relief to environmental refugees fleeing a military conflict, given the international legal vacuum on this matter;

10.2.10. promoting knowledge of and compliance with international legal standards protecting the environment among non-state actors involved in armed conflicts.

B. Draft recommendation[3]

1. The Parliamentary Assembly refers to its Resolution … (2023) "Environmental impact of armed conflicts" and underscores the role of the Council of Europe as a guardian of human rights and the rule of law in times of peace and war. It deplores the devastating effects that armed conflicts have on the environment as a source of living and insists on the co-application of human rights and humanitarian law during times of armed conflict, as confirmed by the United Nations Human Rights Committee and the European Court of Human Rights.

2. The Assembly moreover underlines the indivisibility of human rights and considers that, with the increased acceptance that the right to a healthy environment constitutes a human right, the member States of the Council of Europe should take ambitious measures to improve the legal framework to adequately protect human living space, the environment, and the human right to life and to a healthy environment in the context of armed conflict.

3. The Assembly therefore recommends that the Committee of Ministers:

3.1. urge member States and observers to ratify the United Nations Convention on the Prohibition of Military or Any Other Hostile Use of Environment Modification Techniques (ENMOD convention) and the Additional Protocol to the Geneva Conventions relating to the Protection of Victims of International Armed Conflicts (Protocol I), if they have not yet done so;

3.2. mandate a competent body to study the feasibility of drafting a new regional legal instrument or treaty under the Council of Europe's auspices, with a view to identifying and filling the gaps identified in the existing legal regime for the protection of the environment and human rights to life and to a healthy environment in armed conflicts, wartime or occupation (notably regarding the damage threshold, the characterisation of intent, behaviours that must be sanctioned, entities that should be held liable, enforcement, the scale of liability and proper interpretation of the principles of proportionality, military necessity, and due diligence);

3.3. mandate the governing body of the Convention on the Conservation of European Wildlife and Natural Habitats (ETS No. 104, "Bern Convention") to elaborate recommendations regarding the protection of environmentally sensitive areas during armed conflicts, to study the feasibility of an additional Protocol to the Convention to this end, and to consider creating a review mechanism to ensure that the recommendations are implemented by States parties (notably, transposed into domestic law, incorporated into military doctrine, and shared broadly with a view to developing good practice);

3.4. ensure that the revised Council of Europe Convention on the Protection of Environment through Criminal Law (ETS No. 172) applies also in the context of armed conflicts, wartime or occupation, and covers ecocide;

3.5. allocate sufficient means to ensure proper monitoring and implementation of commitments under the Council of Europe treaties, in particular the Bern Convention and the Landscape Convention (ETS No. 176);

3.6. promote and disseminate the United Nations principles on the protection of the environment in relation to armed conflicts;

3.7. support the creation of a permanent international mechanism to monitor legal infringements and address compensation claims for environmental damage resulting from armed conflicts;

3.8. encourage the European Court of Human Rights to use the functional impact-model with jurisdiction whenever the question of the extraterritorial application of human rights arises in situations of armed conflict or occupation;

3.9. encourage member States to map areas of particular environmental importance or sensitivity in anticipation of any form of armed conflicts and to foresee the demilitarisation of such areas, in case a military conflict breaks out;

3.10. call on member States to update their legal arsenal to criminalise and effectively prosecute ecocide, to establish domestic and/or regional solutions to provide relief to environmental refugees fleeing a military conflict, and to take concrete steps to propose amendment of the Rome Statute of the International Criminal Court in order to add ecocide as a new crime.

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3. Draft recommendation adopted unanimously by the committee on 2 December 2022.

C. Explanatory memorandum by Mr John Howell, rapporteur

1. Introduction

1. The impact on the environment of armed conflict, war or military aggression can be multifaceted, more or less severe, but mostly irreversible. Several armed conflicts of the past can attest to that, including the Vietnam War, the Gulf War, but also the wars in the former Yugoslavia and in the Caucasus, or the military conflicts between Israel and Palestinian territories and Russian Federation's war of aggression against Ukraine, with major environmental damages which can ultimately also affect human health well beyond the conflict area and after the conflict is over. During such conflicts, environmental protection is typically relegated to the backstage (a "silent casualty"), as the focus of the fighting parties in international law must be to protect the life and rights of civilians caught in the crossfire. However, protecting civilians actually also means protecting the environment in which they live and on which they depend.

2. Environmental damage may occur mainly during an armed conflict, but also before its outbreak,[4] and once it is over: there are no "clean wars". It is necessary to consider these damages in terms of human responsibility for the integrity of ecosystems, and as regards impact on human health (right to a healthy environment). To address this concern, the motion entitled "Impact of armed conflict on transboundary environmental damage" (Doc. 15074) was referred to the Committee on Social Affairs, Health, and Sustainable Development for report, and I was appointed rapporteur.

3. This report examines the modalities of the existing international legal framework with regard to environmental protection in times of armed conflict, seeks to provide guidance to policy makers on how it could be used more effectively, and aims to propose additional measures for better protection as necessary (such as regarding compensation for damages, rehabilitation of damaged natural habitats, the definition of "ecocide", etc.). The report considers a few pertinent examples of environmental damage in the light of past and ongoing armed conflicts on European territory. In this context, I should point out that this report is *not* about the political aspects of such conflicts: our focus is on the environment and the related repercussions on public health. This last point is worth emphasising again: it is not about the political aspects of conflicts.

4. As rapporteur, I would like to thank most warmly the experts who have contributed highly valuable elements to this report during the committee hearing on 23 June 2022, notably Ms Marja Lehto, Member of the UN International Law Commission and Special Rapporteur on the Protection of the Environment in Relation to Armed Conflicts; Ms Helen Obregón Gieseken, Legal Advisor of the International Committee of the Red Cross (ICRC) and a co-author of its updated Guidelines on the Protection of the Natural Environment in Armed Conflict; and Ms Karen Hulme, Chair of the Specialist Group on Environmental Security and Conflict Law of the International Union for Conservation of Nature World Commission on Environmental Law, professor of law at the University of Essex. I should also thank my colleagues who not only spoke at the hearing but also provided me with detailed information for the selected cases evoked in this report. Finally, I would also like to thank the Parliament of Ukraine where the Committee on Environmental Policy and Nature Management held a hearing on "The impact of the hostilities on the environment in Ukraine and its restoration" which I attended and spoke at online on 10 November 2022.

2. Legal framework: direct and indirect protection of the environment in times of armed conflicts

5. In the second half of the 20th century, the international legal framework regarding the protection of the environment gradually expanded. It contains certain provisions to protect the environment either directly or indirectly during armed conflicts. In times of war, international humanitarian law applies, including the United Nations Convention on the Prohibition of Military or Any Other Hostile Use of Environment Modification Techniques and the Additional Protocol to the Geneva Conventions relating to the Protection of Victims of International Armed Conflicts (Protocol I). Several of these legal instruments appear to have attained customary law status as recognised by the ICRC in its 2005 Customary International Law Study. The soft law Rio Declaration on Environment and Development of 1992 states that States should "respect international law providing protection for the environment in times of armed conflict".

6. International law doctrine came to accept the interplay between international humanitarian law and international human rights law in the 1996 advisory opinion of the International Court of Justice on the "Legality of the Threat or Use of Nuclear Weapons". This has been followed up, most notably in the advisory opinion on the "Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territories".

4. Through the build-up of military capacity and presence close to a conflict area.

The co-application of human rights and humanitarian law during times of armed conflict has also been confirmed by the UN Human Rights Committee[5] and the European Court of Human Rights.[6] International human rights law thus imposes new substantive and procedural obligations on States involved in armed conflicts. With the increased acceptance that the right to a healthy environment constitutes a human right,[7] States may have extraterritorial human rights obligations arising from such activities.

7. While these instruments provide both direct and indirect protection of the environment in times of armed conflict, several other international instruments also provide additional indirect protection.[8] However, altogether the existing international instruments seem to offer very limited protection to prevent environmental damage in times of armed conflict. International humanitarian law is above all anthropocentric, meaning to preserve the environment in order to ensure humans' interests. In the light of recent political moves at the Assembly and the United Nations levels to anchor the right to a healthy environment, this anthropocentric approach could develop more into an "eco-centric" approach aiming to intrinsically protect the environment.

8. As it were, between 1955 and 1975, the Vietnam War became the stage of environmental destruction as the essential aim of the military strategy. The United States performed experiments to alter the weather in Indochina in order to bring down rain and create mud and flooding in North Vietnam to limit enemy movements and cut off supply lines.[9] These events led to the adoption, on 10 December 1976 and under the United Nations auspices, of a new legal instrument to protect the environment in times of armed conflict: the Convention on the Prohibition of Military or Any Other Hostile Use of Environment Modification Techniques (also called Environmental Modification Convention, ENMOD).[10] This convention was the first instrument of international humanitarian law to consider the environment directly. It also remains the only legal instrument to prohibit the use of the environment as a weapon of war: article 1 of the ENMOD prohibits the "military or any other hostile use of environmental modification techniques having widespread, long-lasting, or severe effects".

9. In 1977, a year after the adoption of the ENMOD Convention, the Additional Protocol (to the Geneva Conventions of 12 August 1949) relating to the Protection of Victims of International Armed Conflicts (Protocol I) was adopted. This international treaty protects the environment against the effects of armed conflicts through two legal provisions: articles 55 and 35.3. Article 55 shows an essentially anthropocentric approach: the obligation to protect the natural environment is based on the need to protect the civilian population. As article 55 states, "care shall be taken in warfare to protect the natural environment against widespread, long-term, and severe damage. This protection includes a prohibition of the use of methods or means of warfare which are intended or may be expected to cause such damage to the natural environment and thereby to prejudice the health or survival of the population". "Attacks against the natural environment by way of reprisals are prohibited". Moreover, the Protocol also protects the natural environment as such: article 35.3 prohibits the use of "methods or means of warfare which are intended, or may be expected, to cause widespread, long-term, and severe damage to the natural environment".

10. The Council of Europe has developed several relevant legal instruments: the Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment (ETS No. 150) and the Convention on the Protection of Environment through Criminal Law (ETS No. 172), as well as the Convention on the Conservation of European Wildlife and Natural Habitats (ETS No. 104, "Bern Convention") and the Landscape Convention (ETS No.176).[11] Convention No. 150 aims to ensure adequate compensation for damage to the environment and provides for means of prevention and reinstatement. Problems of adequate

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5. See for example, UN HRC General Comments Nos. 29 (2001), 31 (2004) and 36 (2017).
6. For example, *United Kingdom v. Hassan*, App. No. 29750/09, 16 September 2014.
7. See for example, UN General Assembly Resolution 76/300 "The human right to a clean, healthy and sustainable environment", 1 August 2022, A/RES/76/300.
8. Additional Protocol to the Geneva Conventions of 12 August 1949 relating to the Protection of Victims of Non-International Armed Conflicts (8 June 1977) (Protocol II); The Hague Convention (IV) respecting the Laws and Customs of War on Land (The Hague, 18 October 1907); The Geneva Convention (IV) relative to the Protection of Civilian Persons in Time of War (Geneva, 12 August 1949); Protocol (II) on Prohibitions or Restrictions on the Use of Mines, Booby-Traps and Other Devices (Geneva, 10 October 1980); Protocol (III) on Prohibitions or Restrictions on the Use of Incendiary Weapons (Geneva, 10 October 1980); The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (the Chemical Weapons Convention, 1993).
9. See https://ihl-databases.icrc.org/customary-ihl/eng/docs/v2_rul_rule45_sectionb.
10. See https://ihl-databases.icrc.org/applic/ihl/ihl.nsf/Treaty.xsp?documentId=2AC88FF62DB2CDD6C12563CD002D6EC1&action=openDocument.
11. This treaty promotes more general protection of the environment, with fifty countries and the European Union being parties to the Convention. There is growing attention to looking at such environmental law instruments to see how far their rules could continue to bind States during conflict. The Bern Convention could be quite useful for this, and the governing body of the convention could possibly undertake specific research and then take a position on this matter.

compensation for emissions released in one country causing damage in another country are also considered of an international nature. That said, this convention does not cover damage that "was caused by an act of war, hostilities, civil war, insurrection".[12] Convention No. 172 aims to deter and prevent conduct that is most harmful to the environment at the European level by using criminal law. It also seeks to harmonise national legislation in this field, notably by obliging the contracting States to introduce specific provisions into their criminal law or to modify existing provisions in this field. Following the high-level Conference on Environmental Protection and Human Rights (held on 27 February 2020 in Strasbourg), the criminal law convention is being revised.[13] Moreover, we should note that the Committee of Ministers Recommendation CM/Rec(2022)20 on human rights and the protection of the environment, adopted on 27 September 2022, mentions "the environmental harm stemming from armed conflicts", reaffirms that "all human rights are universal, indivisible, interdependent and interrelated" and urges steps to recognise the right to a healthy environment at the national level as a human right.

11. Norms of customary international law provide indirect protection of the environment during armed conflicts. These customary norms are the principles of limitation, military necessity, proportionality, discrimination (between civilian and military objectives), precautions, and prevention of causing superfluous injury or unnecessary suffering. The ICRC produced the Red Cross Guidelines for Military Manuals Instructions in 1994 and updated them in 2020.[14] The goal was not a new codification, but for the guidelines to serve as a reference tool for States and to contribute, practically and effectively, to raising awareness about the need for protection of the natural environment. These guidelines are intended to be included in military manuals, instructions, and regulations about the laws of war. They result from existing legal international provisions, in particular humanitarian law, and reflect the national practices on the protection of the environment against the impact of armed conflicts. The updated guidelines recommend specific steps the belligerent parties might adopt to limit the environmental impact of the armed conflict.

12. In parallel to the ICRC's work, in 2019 the International Law Commission (ILC) of the United Nations put forward 28 draft principles on the protection of the environment in relation to armed conflicts as adopted in the first reading ("ILC draft principles"). After revisions in the light of various comments, the final draft principles (27 in total) were adopted on 27 May 2022 in the second reading and will be submitted to the UN General Assembly together with the ILC's comments and recommendations. The ILC draft principles seek to bridge the gap between the reality of current conflicts and the narrow focus of the existing treaty rules. For this reason, they include the pre- and post-conflict phases and touch upon international human rights law and international environmental law.[15] The UN General Assembly is expected to attach the draft principles and comments to its own resolution recommending them to the States, international organisations and all the concerned entities and encouraging their widest possible dissemination.[16]

3. Limitations of the existing legal framework

13. As promising as they can be, the existing legal instruments regarding direct protection of the environment in times of armed conflict are facing multiple issues. Clearly, the application scope of the existing legal instruments is limited. The ENMOD Convention, for instance, presents a lack of universality. Indeed, it only applies to and between State parties. To date, only 78 States have ratified the convention and 16 signed it but have not ratified it. Many European countries have joined the convention, but 11 countries have not.[17] Moreover, the convention only prohibits the use of environmental modification techniques, but not, for

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12. Council of Europe Treaty Office, Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment (ETS No. 150).

13. See also Resolution 2398 and Recommendation 2213 (2021) "Addressing issues of criminal and civil liability in the context of climate change" (Doc. 15362), report of the Committee on Legal Affairs and Human Rights; rapporteur: Mr Ziya Altunyaldiz, Turkey, NR.

14. The Red Cross Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict to be implemented in national military training programmes.

15. "Armed conflicts and the environment: The International Law Commission's new draft principles", Ambassador Marja Lehto, 11 May 2020, and outcome document A/CN.4/L.968 of the 73rd session of the International Law Commission (2022), https://legal.un.org/ilc/guide/8_7.shtml.

16. In the meantime, on 7 December 2022, the General Assembly adopted Resolution A/RES/77/104 - https://daccess-ods.un.org/access.nsf/Get?OpenAgent&DS=A/RES/77/104&Lang=E.

17. These are: Albania, Azerbaijan, Bosnia and Herzegovina, Croatia, France, Georgia, Latvia, Republic of Moldova, Montenegro, North Macedonia, Serbia, as well as Kosovo*. A full list is available at: https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVI-1&chapter=26&clang=_en.

* All references to Kosovo, whether to the territory, institutions or population shall be understood in full compliance with United Nations Security Council Resolution 1244 and without prejudice to the status of Kosovo.

instance, the research, the development, or the preparation of such techniques. Furthermore, there are ambiguities regarding the terms used: the interpretation of "environmental modification techniques", "having widespread, long-lasting, or severe effects" and "the deliberate manipulation of natural processes" is unclear.

14. Like the ENMOD Convention, Protocol I (to the Geneva Conventions of 12 August 1949) only applies to international armed conflict, and the Additional Protocol II relating to the Protection of Victims of Non-International Armed Conflicts does not contain a provision protecting the environment directly. Even though 174 States are parties to Protocol I, certain States, involved in ongoing conflicts causing harm to the environment are not part of it, including the United States or Israel. Doubts also persist about the customary nature of some provisions of this Protocol. The Protocol's application scope, furthermore, faces the issue of nuclear weapons: many countries, including for example France and the United Kingdom, consider that articles 35.3 and 55 only apply to conventional weaponry, thereby excluding nuclear weapons. Moreover, the Protocol also states the need for "widespread, long-term and severe damage to the natural environment": these cumulative criteria impose a high threshold of environmental harm. Like the ENMOD Convention, the interpretation of these notions is unclear, ambiguous, and comes with a high degree of subjectivity.

15. Regarding the Council of Europe's conventions Nos. 150 and 172, a lack of universality is to be noted too. The Convention on civil liability has only been signed by nine Council of Europe member States[18] and has not been ratified by any while the criminal law convention has been signed by fourteen member States[19] and ratified by one (Estonia). Three ratifications being necessary, none of these conventions have entered into force. The Assembly's Resolution 2398 (2021) "Addressing issues of criminal and civil liability in the context of climate change" called for "reinforcing criminal liability for acts and omissions that might […] cause […] severe environmental damage" and asked member States to harmonise "laws on liability for environmental damage, with special focus on the definition of environmental crimes and sanctions related thereto", to "revise or replace, as soon as possible, Convention ETS No. 172 in order to have a legal instrument better adapted to the current challenges", to introduce "the crime of ecocide into their national criminal legislation" and to "consider recognising universal jurisdiction for ecocide and the most serious environmental crimes, including in the 1998 Rome Statute of the International Criminal Court".

16. Moreover, the resolution asked to "strengthen civil liability for environmental damage by amending national civil law legislation, if need be, […] by alleviating the burden of proof, notably by establishing factual presumptions regarding causation, for persons requesting compensation for damage, adding specific provisions on responsibility for ecological harm, and/or by expanding the scope of strict liability in relevant situations relating to environmental damage". The Assembly's Recommendation 2213 (2021) urged the replacement of Convention No. 172 with a new legal instrument and called for revision or replacement of Convention No. 150.

17. The majority of international legal provisions seeking to protect the environment during armed conflict were designed for international armed conflict; however, according to findings of the 2005 ICRC customary law study, they can also apply to internal conflict – the majority of armed conflicts nowadays. Yet, a permanent international mechanism to monitor legal infringements and address compensation claims for environmental damage is missing. The ICRC Guidelines and the ILC draft principles aim to fill some of these gaps between existing legal rules and reality, showing that there is potential for a more coherent reading of the existing rules. Nevertheless, Ambassador Marja Lehto, Special Rapporteur of the ILC for the environment and armed conflicts, argues that there is still no coherent legal framework for the protection of the environment in relation to armed conflicts.[20]

18. The protection of the environment provided indirectly by international customary law is limited. The environment is only protected in an incidental manner, subordinated to wartime requirements, and conditioned on humanitarian imperatives. For example, the principle of military necessity forbids belligerents' actions and harm to the environment, if an attack does not involve any military advantage. While this principle appears to be useful for the protection of the environment in times of armed conflict, the principle of military necessity can, *a contrario*, legitimise environmental destructions required by the goals of the war and justify many measures disastrous for the environment.

19. The same goes with the principle of proportionality: it can be lawful to inflict collateral environmental damages when the military advantage conferred by the attack is sufficiently important to justify exposing the environment to an increased risk. The more important the objective, the more environmental risk will be

18. Cyprus, Finland, Greece, Iceland, Italy, Liechtenstein, Luxembourg, Netherlands, and Portugal.
19. Austria, Belgium, Denmark, Estonia, Finland, France, Germany, Greece, Iceland, Italy, Luxembourg, Romania, Sweden, and Ukraine.
20. "Overcoming the disconnect: environmental protection and armed conflict", Ambassador Marja Lehto, 27 May 2021.

accepted: “in applying this principle, it is necessary to assess the importance of the target in relation to the incidental damage expected: if the target is sufficiently important, a greater degree of risk to the environment may be justified”.[21] Moreover, these principles are not easy to apply in practice. The necessity to hierarchise priorities will lead to putting the environment at the bottom of the ladder in times of war when confronted with other values. In any event, the incidental protection of the environment is uncertain.

4. Transboundary environmental damage

20. Transboundary damage is the harm caused by activities carried out in places under the jurisdiction or control of one State and arising in places under the jurisdiction or control of another State or in places outside national jurisdiction. Transboundary environmental damage mostly takes 3 forms: air pollution, pollution of a transboundary watercourse (or land in case of territorial/border changes between States), and transboundary shipment or dumping of waste. In times of military conflict, the environment typically suffers from damages to strategic infrastructure and related pollution but also from “scorched earth techniques” which can include the deliberate destruction of agricultural facilities (in particular water canals, wells, and pumps), crops and forests.

21. According to the theory of limited territorial sovereignty, States have responsibility for environmental damage extending beyond their territorial limits. This international theory is an analogy to the Roman law maxim *sic utere tuo ut alienum non laedas* that means “use your property so as not to injure that of another”. It was applied in the 1941 Trail Smelter Arbitration. According to this decision, States must refrain from causing ecological damages to other States (also in cases of occupation)[22] or places outside the jurisdiction of any State. This principle (prevention of transboundary harm and due diligence principle) is included in international conventions and non-binding instruments[23] and has a customary value. According to the Corfu Channel Case (1947-1949), it is applicable in times of armed conflict, as an obligation for belligerent States in their relations with non-belligerent States.

22. Regarding the specific issue of situations of occupation, the duty of diligence of the occupying State or power is backed by a few international humanitarian law provisions. Most of those provisions are contained in the Hague Regulation from 1907, the fourth Geneva Convention (of 1949) and the first additional protocol to the Geneva Conventions (of 1977). They have obtained customary value and provide for an indirect protection through the protection of both public and private property,[24] and through the obligations of the occupying power. The occupant has indeed an obligation (“best-effort” obligation, not “result-oriented” obligation) to protect the environment under both international law (duty of diligence) and the domestic law of the occupied State.[25]

23. Moreover, international humanitarian law rules on neutrality apply in times of armed conflict and occupation whereby the territory of neutral States is deemed inviolable and protected from collateral damage.[26] The obligation to prevent transboundary harm is also linked to international practice concerning compensation for damage. The UN Compensation Commission,[27] for instance, has systematically applied environmental law principles in considering environmental claims. Some multilateral environmental agreements provide for a conciliatory approach to environmental protection during armed conflicts.[28] We should note further that due diligence obligations for States entail responsibility for lack of vigilance regarding acts of non-state actors.[29]

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21. Final report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign against the Federal Republic of Yugoslavia, 3 June 2000, para. 19.
22. Such as in the International Court of Justice’s Advisory Opinion in the Namibia case (Legal Consequences for States of the Continued Presence of South Africa in Namibia (Southwest Africa)) notwithstanding Security Council Resolution 276 (1970), Advisory Opinion, ICJ Reports 1971, p. 16, para.118).
23. Examples: United Nations Convention on the Law of the Sea (10 December 1982), article 194 para. 2; and Rio Declaration on Environment and Development, principle 2.
24. See Article 23(g) of the Hague Regulation of 1907 and its specific application to forests and agricultural lands in Article 55.
25. See Article 43 of the Hague Regulation of 1907: “The authority of the legitimate power having in fact passed into the hands of the occupant, the latter shall take all the measures in his power to restore, and ensure, as far as possible, public order and safety, while respecting, unless absolutely prevented, the laws in force in the country.”
26. M. Bothe, “The Law of Neutrality”, in D. Fleck (ed.), *The Handbook of International Humanitarian Law*, 3rd Edition, Oxford University Press 2013, pp. 547–580, pp. 559–600.
27. The Compensation Commission was created in 1991 as a subsidiary organ of the UN Security Council under Security Council Resolution 687 (1991) to process claims and pay compensation for losses and damage suffered as a direct result of Iraq’s unlawful invasion and occupation of Kuwait in 1990-1991.
28. B. Sjöstedt, *The Role of Multilateral Environmental Agreements: A Reconciliatory Approach to Environmental Protection in Armed Conflict*, Hart Publishing, New York, 2020.

4.1. The Kosovo War

24. The Kosovo War on Yugoslavian territory (from 6 March 1998 to 10 June 1999) is one relevant example we can look at for the purposes of this report. This military conflict opposed the armed forces of the Federal Republic of Yugoslavia and the Kosovo Liberation Army. During this war, the North Atlantic Treaty Organisation (NATO) also conducted military operations against the Federal Republic of Yugoslavia. Industrial sites and energy installations were damaged by bombing or missile strikes. The destruction and fires at these sites caused serious damage to the country's natural environment. The bombing affected ecosystems, surface water, groundwater, protected areas, forests, landscapes, soils, and air in the Balkans that were contaminated in an unprecedented manner. Over 100 toxic substances were involved, including ordnance containing depleted uranium used by NATO in several operations.[30] There is a growing amount of evidence that the dispersion of depleted uranium can be linked to the increased incidence of aggressive cancers such as leukaemia among the local population, military personnel, and peacekeepers.[31]

25. The environmental impact of the Kosovo War was transboundary. Contaminations were registered within former Yugoslavia (North Macedonia, Serbia) but also in several other countries of southeast Europe, including Albania, Bulgaria, Greece, Hungary, Romania, and Ukraine. The Danube basin, transboundary waterways, and groundwater have all been affected. Environmental impact also resulted from population displacement and the refugees' camps set up, mainly in Albania and North Macedonia.

26. In 2001, the Assembly adopted a report entitled "Environmental impact of the war in Yugoslavia on south-east Europe".[32] The rapporteur Mr Serhiy Kurykin pointed out that States involved in the operations "disregarded the international legal rules" (Articles 55 and 56 of Protocol I (1977) to the Geneva Conventions (1949) and Principle 24 of the Rio Declaration on Environment and Development (1992)) "intended to limit environmental damage in armed conflict". In the Assembly's view, the Kosovo War has revealed "the inability of contemporary international law" to prevent or lessen violations of fundamental human rights in any future conflict. These rules should be "strengthened and enforced". In its Recommendation 1495 (2001), the Assembly called for the drawing up of a new European convention, "notably to ensure compliance with Articles 55 and 56 of Protocol I (1977) to the Geneva Conventions of 1949, on the prevention of environmental damage as a result of military force or crisis-defusing measures".

27. However, in the report on "Armed conflict and the environment" of 2011,[33] the rapporteur adopted a different approach, arguing that it was "not necessary to draw up a new convention concerned exclusively with protecting the environment in time of war". He proposed "to make proper use of existing treaties", notably by relaunching "the ENMOD Convention in order to restrict military climate change programmes" and implementing the "Red Cross Guidelines for Military Manuals and Instructions on the Protection of the Environment in Times of Armed Conflict in national military training programmes" (as stated in Resolution 1851 (2011)). At the same time, the Assembly recommended to "support the drafting of a treaty to ban phosphorous weapons".

4.2. Russian Federation's war of aggression against Ukraine

28. Since February 2014, a protracted armed conflict between the Russian Federation and Ukraine has been going on with substantial environmental spill-overs. Following the illegal annexation of the Crimean Peninsula at the north of the Black Sea by the Russian Federation, Ukraine blocked the North Crimean Canal that was ensuring 85% of the water supply in the Crimean Peninsula. Since then, Crimea has suffered unprecedented water shortages. To compensate for the loss of water from the canal, multiple wells have been drilled in Crimea causing salinisation of groundwater and soil, and the subsequent loss of agricultural crops. The exceptional weather conditions in 2020 – with the lack of snow over the winter and a spring without rain – exacerbated the situation.

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29. Armed Activities on the Territory of the Congo (Democratic Republic of the Congo v. Uganda), Judgment, 19 December 2005, ICJ Reports 2005, p. 116, para. 248.
30. See www.dw.com/en/uranium-risks-haunt-kosovo-survivors/a-16366645-0.
31. "Incidence of haematological malignancies in Kosovo – A post 'uranium war' concern", published online on 4 May 2020, Hatixhe Latifi-Pupovci, Miranda Selmonaj, Blerina Ahmetaj-Shala, Mimoza Dushi, Violeta Grajqevci.
32. Doc. 8925 (report of the Committee on the Environment, Regional Planning and Local Authorities, Rapporteur: Mr Serhiy Kurykin, Ukraine, NR).
33. Doc. 12774 (report of the Committee on the Environment, Regional Planning and Local Authorities, Rapporteur: Mr Rafael Huseynov, Azerbaijan, ALDE).

29. Another consequence of the water shortage was the drying up of an acid reservoir located near the "Crimean Titanium" plant, a chemical producer of titanium dioxide.[34] The drying up has led to the intense release of sulphurous anhydride in the air. Sulphurous anhydride is a very harmful air pollutant causing irritation and impairment of respiratory organs. In contact with water, it becomes a sulfuric acid that contributes to acid rain phenomena. This can lead to the acidification of surface waters causing soil degradation and harmful effects on plants and animals.

30. While the environmental situation in Eastern Ukraine was already precarious due to the operation of about 5 300 heavy industry enterprises (including coke, ferrous metallurgy and chemical plants, mines, oil refineries, power generation stations, etc.) in that area, the military conflict has significantly worsened the pollution of air, land, and water with toxic chemicals. Electricity breakdowns due to military fighting caused frequent shutdowns of ventilation systems and water pumps across industrial facilities and coalmines in the region, leading to leaks of toxic substances and accidents. For instance, a release and explosion of methane in the Zaysadko mine in Donetsk during the shelling of the nearby airport (March 2015) killed 33 of the 200 miners then underground. Similarly, fire in the Avdiivskyi plant in May 2015 as a result of shelling caused a massive leak of coke gas containing benzol, toluene, naphthalene, hydrogen sulphide, ammonium, and methane. Yet another aspect is the chemical pollution of agricultural land and waterways with heavy metals and nitrates from weapon explosions and spills of mine waters, fuels, and lubricants.[35] The Conflict and Environment Observatory recorded more than 500 accidents and operational disruptions in Eastern Ukraine's industrial sites over the 2014-2017 period, while 60 out of 135 protected natural sites have been damaged.[36]

31. The current escalation of hostilities by the Russian Federation into all-out war has spread the damage to infrastructure and the environment across many parts of Ukraine. We currently do not have the full overview of the massive destruction that is still going on. However, one immediate concern relates to the safety of Ukraine's nuclear power plants: the country's 15 nuclear reactors (including 8 that are currently in operation) and the closed but not decommissioned Chernobyl nuclear plant are at risk of accidental or intentional damage from missile attacks or disruptions in the maintenance operations.

32. According to the International Atomic Energy Agency (IAEA), several electricity supply cuts to the Chernobyl plant (including the radioactive waste storage facilities) have been repaired after the Russian armed forces took control of the site. The IAEA has estimated that several out of the seven indispensable pillars for nuclear safety "have been compromised or challenged" in Chernobyl during the full scale war of aggression against Ukraine that began on 24 February" 2022. Moreover, the Zaporizhzhia nuclear power plant – the biggest in Europe – has been controlled by Russian forces since 4 March; two of the four plant's power lines and the administrative buildings have been damaged by warfare.

33. The IAEA describes the current situation in Ukraine as unprecedented, difficult and challenging, which "will become unsustainable" at certain sites such as Zaporizhzhia.[37] The latest IAEA mission to Zaporizhzhia sought to evaluate damages at the power plant and the state of the security systems in place as heavy fighting continued in the surrounding area. It noted, on 5 September 2022, that "there have been numerous shelling incidents at or near the [Zaporizhzhia nuclear power plant], causing damage at the facility and raising widespread concern about the risk of a severe nuclear accident potentially jeopardizing human health and the environment".[38]

34. The Assembly's Resolution 2463 (2022) "Further escalation in the Russian Federation's aggression against Ukraine" has strongly condemned the "illegal occupation and militarisation of the nuclear power plant in Zaporizhzhia" and considered that "the leadership of the Russian Federation has increased threats of nuclear warfare". Those threats were deemed to be "in breach of international law and incompatible with the responsibilities of a nuclear power holding a permanent seat in the United Nations Security Council". In early October 2022, Russia announced the annexation of the Zaporizhzhia nuclear plant in violation of international law.

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34. See https://uacrisis.org/en/68485-environmental-disaster-crimea.
35. "The environmental impact of military actions in eastern Ukraine and the annexation of the Crimea", Svitlana Andrushchenko, 24 May 2016.
36. See https://ceobs.org/country-brief-ukraine/.
37. Update 20 – IAEA Director General Statement on Situation in Ukraine, 13 March 2022, www.iaea.org/newscenter/pressreleases/update-20-iaea-director-general-statement-on-situation-in-ukraine, and Summary Report by the Director General, 24 February – 28 April 2022, www.iaea.org/nuclear-safety-and-security-in-ukraine.
38. Update 98 – IAEA Director General Statement on Situation in Ukraine, 5 September 2022, www.iaea.org/newscenter/pressreleases/update-98-iaea-director-general-statement-on-situation-in-ukraine.

35. In this context we should note that Article 56 of the Additional Protocol to the Geneva Conventions of 12 August 1949, relating to the Protection of Victims of International Armed Conflicts (Protocol 1), provides for specific reinforced protection for all "works and installations containing dangerous forces". This expressly includes nuclear power stations and other installations located at or in the vicinity of such stations which "shall not be made the object of attack, even where these objects are military objectives, if such attack may cause the release of dangerous forces and consequent severe losses among the civilian population". However, such special protection for a nuclear power plant may cease "if it provides electric power in regular, significant and direct support of military operations" and if a military attack "is the only feasible way to terminate such support".

4.3. The issue of environmental refugees

36. As the motion for a resolution at the origin of this report notes, "armed conflicts contribute to the global climate change crisis" and "wars also cause significant depletion of natural resources, which in turn leads to humanitarian catastrophes and food crises", significantly contributing "to the rise of the number of refugees in the world". This Assembly has considered the issue of environmental refugees in the context of climate change and urged better protection of victims of both natural and man-made disasters.[39] In a further step, the Assembly adopted, in January 2022, a resolution and a recommendation on the impact of climate change on children's rights which recommends that member States should collaborate towards establishing a legal status of environmental refugees "at international and European levels and adequately protect the victims of forced migration due to climate change and environmental degradation, in particular children".[40] Such a legal status should also cover environmental refugees fleeing a military conflict.

5. Paving the way towards the recognition of ecocide at international level

37. As discussions in committee have shown, there is growing interest and support to incorporate the notion of ecocide into the international legal order. Indeed, several States have already added this concept to their domestic law, mostly in their national Criminal Code.[41] Political support towards the international establishment of ecocide in the context of the Rome Statute of the ICC is also growing impressively, be it through political declarations by Heads of States and national Ministers[42] or through parliamentary initiatives.[43] Regional implementation of the concept of ecocide has also been announced by the Nordic Council of Ministers in June 2022 and was called for by the European Parliament in its Resolution 2021/2181(INI) of 17 February 2022 on human rights and democracy in the world and the European Union's policy on the matter. The latter "encourages the EU and its Member States to promote the recognition of ecocide as an international crime under the Rome Statute of the ICC", asks the European Commission to "study the relevance of ecocide to EU law and EU diplomacy" and calls on the EU and its member States to "take bold initiatives to fight the impunity of environmental crimes at a global level".

38. However, as national and regional understandings of ecocide might differ, incorporating ecocide into the international legal order implies the need to agree on the meaning of this notion. Although to this day, there is no internationally established definition of ecocide, some work on the subject has already been accomplished. This notably includes the much-acclaimed proposal of a definition by the international Independent Expert Panel for the Legal Definition of Ecocide, commissioned by the Stop Ecocide Foundation.[44] Some common features can also be identified in all existing domestic legal definitions of

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39. Resolution 2307 (2019) "A legal status for 'climate refugees'" and Doc. 14955 (report by the Committee on Migration, Refugees and Displaced Persons; rapporteur: Ms Marie-Christine Verdier-Jouclas, France, ALDE).

40. Resolution 2415 and Recommendation 2219 (2022) "Inaction on climate change – a violation of children's rights" and Doc. 15436 (report by the Committee on Social Affairs, Health and Sustainable Development; rapporteur: Ms Jennifer De Temmerman, France, ALDE).

41. A crime of ecocide is established in the Criminal Code of Vietnam (which was the first State to do so, in 1990), Russia, Kazakhstan, Kyrgyz Republic, Tajikistan, Georgia, Belarus, Ukraine, Republic of Moldova, Armenia, as well as in two states of Mexico (Chiapas and Jalisco), and in the French Environmental Code (as a *"délit"*).

42. In 1972, following the Vietnam war, the Prime Minister of Sweden Olof Palme was the first to use the word 'ecocide' to refer to serious destruction of nature, and called for it to be addressed at the international level. The discussion was reopened under the impulse of Vanuatu and the Maldive States in December 2019, during the 18th session of the ICC's Assembly of States Parties. Since then, members of the government of France, Belgium, Finland, Canada, Luxembourg, Samoa, Bangladesh, Kenya and Panama have supported proposals to recognise ecocide in the Rome Statute of the ICC and at national level.

43. Parliamentary motions and resolutions were notably passed in Spain, Denmark, Belgium, Chile, Scotland, and Brazil. Parliamentary initiatives regarding ecocide are still being discussed in other States, including Iceland, Mexico, and Bangladesh.

ecocide. Thus, we should note that the concept of ecocide, in all adopted and proposed definitions, applies in both peace time and war time. I find that it is highly pertinent for the Council of Europe to refer to the first legal definition of ecocide implemented in domestic law, namely Article 422 of the Vietnamese Criminal Code.[45] This definition inspired most of the later national steps of incorporating ecocide into domestic laws. Moreover, the description of the environment as a "source of living" establishes a clear link with human rights.

39. This Assembly should therefore advocate for the concept of ecocide to be implemented and made operational through the ongoing revision processes of relevant legal instruments at European level, including the EU Directive 2008/99/EC on the protection of the environment through criminal law[46] and the Council of Europe's Convention on the Protection of Environment through Criminal Law (ETS No. 172). Member States of the Council of Europe should also support the effort of recognition of ecocide as an international crime through the amendment of the Rome Statute of the ICC. The momentum could be increased by adding the concept into domestic law and practice. For States having already established ecocide in domestic law, the focus should be on making this crime "operational", by providing means to prosecute and making it a priority in the prosecuting guidelines, especially in countries where the opportunity of prosecution exists.

6. Conclusions and recommendations

40. As we can see from the above, the existing legal framework is patchy but expanding. The Council of Europe could seize the momentum of enhanced political attention to the vital link between human rights and the environment and revise, update, or complete selected legal instruments so as to ensure a more adequate protection of environment in the context of armed conflicts. This committee (and subsequently the Assembly) should advocate for the relevant international legal framework to be invoked and interpreted in a more open-ended manner so as to offer more comprehensive protection of both the environment and human health in cases of armed conflicts. We should in particular offer strong support for the ILC draft principles as adopted in 2022 and promote their practical implementation through the member States of the Council of Europe.

41. I believe that different legal instruments and mechanisms could be better combined to overcome practical application problems. Indeed, as Mr Antoine Bouvier, a jurist with the ICRC, pointed out, "the existing law provides adequate protection as long as it is correctly implemented and respected", but States need to collectively ensure "a better enforcement of existing international obligations". That said, there are some limitations inherent in the interplay between fields of law. Conducting a study on the possible interplay between existing international criminal law and environmental harm occurring during armed conflicts would be of strong interest. The possibility to invoke existing war crimes should be a major focus of such a study. The

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44. This panel published, in 2021, proposed amendments to the Rome Statute to the ICC, accompanied by an interpretation guide. It notably proposes to add the following Article 8ter on ecocide to the Rome Statute:

"1. For the purpose of this Statute, "ecocide" means unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts.

2. For the purpose of paragraph 1:

a. "Wanton" means with reckless disregard for damage which would be clearly excessive in relation to the social and economic benefits anticipated;

b. "Severe" means damage which involves very serious adverse changes, disruption or harm to any element of the environment, including grave impacts on human life or natural, cultural or economic resources;

c. "Widespread" means damage which extends beyond a limited geographic area, crosses state boundaries, or is suffered by an entire ecosystem or species or a large number of human beings;

d. "Long-term" means damage which is irreversible or which cannot be redressed through natural recovery within a reasonable period of time;

e. "Environment" means the earth, its biosphere, cryosphere, lithosphere, hydrosphere and atmosphere, as well as outer space."

45. Article 422 of the Vietnamese Criminal Code: "Crimes against humanity

1. Any person who, whether in peacetime or wartime, commits genocide against [the] population of an area, destroys sources of living [or the] cultural or spiritual life of a nation or sovereign territory, upsets the foundation of a society in order to sabotage it, or commits other acts of genocide, or destroys … the environment shall face a penalty of 10–20 years' imprisonment, life imprisonment, or death.

2. [If t]his offence is committed under pressure or order[s] given by superior officers, the offender shall face a penalty of 10–20 years' imprisonment."

46. Currently, the proposal only mentions ecocide in the recitals (point 16). The European Economic and Social Committee, a consultative body of the EU, recommended an explicit reference to be included in the operational part of the Directive as well (October 2021, see: www.eesc.europa.eu/nl/our-work/opinions-information-reports/opinions/improving-environmental-protection-through-criminal-law).

Council of Europe could serve as a laboratory of new legal developments and take the lead in this study while involving other organisations (the ILC, the ICRC, the Conflict and Environment Observatory, PAX,[47] etc.) already working on similar subjects.

42. Moreover, the Council of Europe should continue reflections on the possibility of developing a new "ecocide" criminal offense at international level. This could be discussed during the revision procedure of the Council of Europe Convention on the Protection of Environment through Criminal Law (ETS No. 172). When considering this subject matter, special attention should be paid to the kind of behaviours that must be sanctioned, the entities that should be held liable, the damage threshold, the characterisation of intent and the enforcement issues. The threshold of environmental damage should in particular be defined precisely, using the latest work and the ICRC's updated Guidelines on the Protection of the Natural Environment in Armed Conflict, as well as examples. This definition effort would help lower the obstacle constituted by the interpretation of threshold in practice (namely, what constitutes "significant harm", or "widespread, long-term, and severe damage"). The suppression of this threshold instead of a clear (or clearer) definition could also be an option to consider.

43. Regarding the issue of enforcement of the existing legal framework, we should advocate for the development of review and monitoring mechanisms based on the relevant provisions of the Rome Statute (of the International Criminal Court) and international humanitarian law.

44. The Council of Europe could also encourage the development of new tools. The Bern Convention (ETS No. 104), for instance, could serve as a forum to discuss new policies for a better protection of wildlife and natural habitats in times of armed conflicts. The mapping of areas of particular environmental importance or sensitivity, based on existing protected areas (such as world heritage sites or natural reserves), in anticipation of any form of armed conflicts should be strongly recommended. In case a military conflict breaks out, these areas should become demilitarized zones. The Standing Committee governing the Bern Convention could publish recommendations regarding the protection of environmentally sensitive areas during armed conflicts, study the feasibility of an additional Protocol to the Convention to this end, and also create a review mechanism to ensure that the recommendations are implemented by States parties. These recommendations should be further transposed into domestic law, be incorporated into military doctrine, and be shared among member States towards developing good practice. The Committee of the Bern Convention could work together with the ICRC on this topic.

45. The drafting of a new regional legal instrument or treaty could also be discussed under the Council of Europe's auspices. In that case, the proposal should clarify and fill the identified gaps of the existing legal regime (namely, on damage threshold, enforcement and liability, and the due diligence principle). Even if such a proposal would only bind the States parties in the end, it may contribute to reinforcing customary humanitarian law dealing with environment protection and may inspire other forms of co-operation. Moreover, the European Court of Human Rights should be encouraged to use the functional impact-model with jurisdiction whenever the question of the extraterritorial application of human rights arises in situations of armed conflict or occupation. Under the functional impact-model, jurisdiction would be invoked in situations where the impact is direct and reasonably foreseeable. The purpose of this effort would be to fill the legal vacuum leading to "legal blackholes" and arbitrariness.

46. It is indeed of crucial importance to continue building on good practices in order to establish or reinforce new customary law principles. Therefore, member States of the Council of Europe, as well as observer States and States whose parliament enjoys observer or partner for democracy status, should ratify existing legal instruments, including the ENMOD Convention, actively participate in the revision process of the Council of Europe's convention 172, and employ sufficient means to ensure proper monitoring and implementation of commitments. Moreover, it has been observed that, on the ground and when in doubt, belligerents primarily refer to military manuals. Hence, member States should adopt adequate operational documents and keep them up to date with the international legal framework.

47. Finally, national authorities need to pay more attention to loopholes identified in the existing legal framework when envisaging upcoming work. Specific attention should be paid to the issue of environmental refugees, the lack of a clear and well-developed international framework regarding situations of occupation, as well as issues of compliance with international humanitarian law in the context of internal armed conflicts. Regarding the latter, it is of crucial importance to engage with the key actors on the ground (ICRC, third States

47. PAX is an organisation based in the Netherlands that works with various partners, including the UN organisations, "to document the environmental impact of new and ongoing conflicts, and to build better responses in order to reduce threats to public health and environmental risks for civilians"; see https://paxforpeace.nl/what-we-do/programmes/conflict-environment.

acting as mediators, NGOs) in order to promote knowledge of and compliance with international standards among non-state actors. Working groups and coalitions could also be created on the specific issue of awareness raising on the environmental impact of armed conflicts regarding non-state belligerents and should bring together all relevant international organisations, States, strategic NGOs and civil society, the main actors on the ground and academic scholars.