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PROSECUTING INDIVIDUALS FOR ENVIRONMENTAL HARM IN THE ARMED CONFLICT BETWEEN RUSSIA AND UKRAINE: THE CASE OF DESTRUCTION OF THE KAKHOVKA DAM

Abstract: *The ongoing conflict between Russia and Ukraine has caused serious harm to the environment, resulting in the destruction of ecosystems, a reduction in biodiversity, and damage to natural reserves and protected ecosystems. This type of damage may fall under the jurisdiction of both the International Criminal Court (ICC) under Art. 8(2)(b)(iv) of the ICC Statute regarding war crimes and the Ukrainian domestic courts under Art. 441 of the Criminal Code of Ukraine (CCU) regarding ecocide. However, while Ukrainian domestic judicial authorities are already conducting investigations under Art. 441 CCU, the prosecution by the ICC for environmental damage should satisfy the high threshold imposed by Art. 8(2)(b)(iv) of the ICC Statute. It would be interesting to see whether the ICC Prosecutor will initiate an investigation into the Kakhovka dam bombing, just like Ukrainian domestic authorities have already done.*

Keywords: armed conflict, International Criminal Court, ecocide, environmental harm, armed aggression against Ukraine

INTRODUCTION

With its high diversity of habitats and species, Ukraine is often referred to as the “Green Heart of Europe”.¹ Consequently, since the Revolution of 2014 Ukraine has

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¹ *WWF-CEE Statement Regarding Kakhovka Dam Destruction in Ukraine*, WWF, 9 June 2023, available at: <https://www.wwf-CEE.org/news/wwf-CEE-statement-regarding-kakhovka-dam-destruction-in-ukraine> (accessed 30 August 2024).

intensified its efforts to address environmental challenges. The country has taken numerous steps to restore and preserve its natural capital, integrate environmental concerns into economic development, and accelerate the transition towards a green and low-carbon economy.

These steps align with Ukraine's commitment to international environmental obligations. Over the years, it has ratified numerous international conventions on this matter, including the Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques in 1978 (ENMOD Convention);² the Convention on Biological Diversity in 1995;³ the UN Framework Convention on Climate Change in 1997;⁴ the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal in 1999;⁵ as well as many others. All these instruments have become part of Ukraine's national legislation pursuant to Art. 9(1) of the Constitution of Ukraine adopted in 1996.⁶

Such progresses have been undermined since the start of the aggression by Russia on 24 February 2022. As recognized by the International Law Commission, "environmental consequences of armed conflicts may be severe and have the potential to exacerbate global environmental challenges, such as climate change and biodiversity loss."⁷ In fact, alongside human lives, the environment has also become a silent victim of the war.⁸ As of 18 December 2023, the Ukrainian Ministry of Environmental Protection and Natural Resources' EcoZagroza platform claimed to have verified 2643 reports of alleged environmental crimes by the Russian Federation occupiers since the start of the conflict.⁹ These crimes primarily involve the chemical pollution of soil and water, leading to longer-term health threats, destruction of ecosystems, reduction of biodiversity, and damage to natural reserves and protected ecosystems, through both the direct impact of the armed activities as well as the

² Convention on the Prohibition of Military or any other Hostile Use of Environmental Modification Techniques (adopted 10 December 1976, entered into force 5 October 1978), 1108 UNTS 151.

³ Convention on Biological Diversity (adopted 5 June 1992, entered into force 29 December 1993), 1760 UNTS 79.

⁴ United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994), 1771 UNTS 107.

⁵ Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (adopted 22 March 1989, entered into force 5 May 1992), 1673 UNTS 57.

⁶ Art. 9(1) of Constitution of Ukraine (The Official Bulletin of the Verkhovna Rada of Ukraine (BVR), 1996, No. 30, Article 141) available at: <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80?lang=en#Text> (accessed 30 August 2024).

⁷ Draft principles on protection of the environment in relation to armed conflicts, available at: https://legal.un.org/ilc/texts/instruments/english/draft_articles/8_7_2022.pdf (accessed 30 August 2024).

⁸ Cf. S.O. Kharytonov, R.S. Orlovskiy, O. V. T.V. Kurman, O.O. Maslova, *Criminal Legal Protection of the Environment: National Realities and International Standards*, 32(6) European Energy and Environmental Law Review 283 (2023), pp. 283–292.

⁹ See EcoZagroza, available at: <https://ecozagroza.gov.ua/en> (accessed 30 August 2024).

increase in waste.¹⁰ Twenty percent of all nature conservation areas in Ukraine have been affected by the war, and due to damage to the water supply infrastructure, an estimated 1.4 million people currently have no access to safe water. Numerous online platforms provide information on environmental harm and hazards resulting from the conflict. Some, like SaveEcoBot,¹¹ enable users to report instances of environmental damage or suspected environmental crimes.

Moreover, as highlighted recently by the United Nations Office for the Coordination of Humanitarian Affairs, Ukraine is now one of the most mined countries in the world. In territories no longer occupied by Russian troops, experts from the country's emergency services are defusing hundreds of mines daily. This situation also pertains to the Chernobyl Nuclear Power Plant landmines,¹² which are regularly triggered by wild animals, causing forest fires with a significant risk of increasing the radiation background in the Kyiv region.

Individuals accountable for environmental crimes can face prosecution in both international jurisdictions and national criminal jurisdictions within those States provided with jurisdiction. This article examines these legal avenues in the context of the ongoing armed conflict between Russia and Ukraine, with specific regard to the alleged bombing of the Kakhovka hydroelectric dam which occurred on 6 June 2023.

1. INTERNATIONAL JURISDICTION OVER ENVIRONMENTAL HARM IN UKRAINE

Ukraine has ratified the International Criminal Court (ICC) Statute only on 21 August 2024 with law No. 3909-IX.¹³ However, it had accepted the jurisdiction of the Court beforehand under Art. 12(3) of the ICC Statute via two declarations deposited respectively on 9 April 2014 concerning any crimes committed on Ukrainian territory between 21 November 2013 and 22 February 2014; as well as on 8 September 2014 regarding all those potentially committed from 20 February 2014, onwards.¹⁴ As a consequence, the ICC opened a criminal proceeding over

¹⁰ J. Zhou, I. Anthony, *Environmental Accountability, Justice and Reconstruction in the Russian War on Ukraine*, Stockholm International Peace Research Institute, 25 January 2023, available at: <https://www.sipri.org/commentary/topical-background/2023/environmental-accountability-justice-and-reconstruction-russian-war-ukraine> (accessed 30 August 2024); M. Medvedieva, *Russia's Military Aggression and Damage to Ukraine's Environment*, 2 Ukrainian Journal of International Law 106 (2022), pp. 106–109.

¹¹ *War crimes against the environment of Ukraine*, SaveEcoBot, available at: <https://www.saveecobot.com/en/features/environmental-crimes> (accessed 30 August 2024).

¹² On the protection of power plants, see E. Weinthal, C. Bruch, *Protecting Nuclear Power Plants during War: Implications from Ukraine*, 53(4) Environmental Law Reporter 10285 (2023), p. 10285.

¹³ Rome Statute of the International Criminal Court (adopted 17 July 1998, entered into force 1 July 2002), 2187 UNTS 3. The text of the law No. 3909-IX is available only in Ukrainian at: <https://zakon.rada.gov.ua/laws/show/3909-IX#Text> (accessed 30 August 2024).

¹⁴ Declaration No. 61219/35-673-984, Hague, 9 April 2014, available at: <https://www.icc-cpi.int/sites/default/files/itemsDocuments/997/declarationRecognitionJurisdiction09-04-2014.pdf>

the situation in Ukraine, namely for crimes committed in Ukraine during the invasion by Russia.¹⁵ Within this proceeding, six arrest warrants have already been issued. The first two were delivered on 17 March 2023 against Russian President Vladimir Putin and Russian Commissioner for Children's Rights Maria Lvova-Belova, both charged with the deportation and forced transfer of minors from occupied territories under Arts. 8(2)(a)(vii) and 8(2)(b)(viii) of the ICC Statute.¹⁶ The last two arrest warrants were issued more recently, namely on 25 June 2024, against Sergei Kuzhugetovich Shoigu, Minister of Defence of the Russian Federation at the time of the alleged conduct, and Valery Vasilyevich Gerasimov, Chief of the General Staff of the Russian Federation's Armed Forces, and First Deputy Minister of Defence of the Russian Federation. According to the Pre-Trial Chamber II, there are reasonable grounds to believe that both individuals bear individual criminal responsibility for the war crime of directing attacks against civilian objects (art. 8(2)(b)(ii) of the ICC Statute), the war crime of causing excessive incidental harm to civilians or damage to civilian objects (art. 8(2)(b)(iv) of the ICC Statute) and the crime against humanity of inhumane acts under article 7(1)(k) of the ICC Statute.¹⁷

Even though there is an open investigation over the situation in Ukraine, no individual action has yet been taken with regard to crimes committed against the environment. However, a few rules of the ICC Statute may well constitute a basis for prosecution of the environmental harms.¹⁸ In particular, Arts. 6(b) and 6(c)

(accessed 30 August 2024); Declaration No. 145-VIII, Hague, 8 September 2014, available at: https://www.icc-cpi.int/sites/default/files/iccdocs/other/Ukraine_Art_12-3_declaration_08092015.pdf (accessed 30 August 2024).

¹⁵ *Statement of ICC Prosecutor, Karim A.A. Khan QC, following the arrest and transfer of a fourth suspect in the Situation of the Central African Republic*, International Criminal Court, 18 March 2022, available at: <https://www.icc-cpi.int/news/statement-icc-prosecutor-karim-aa-khan-qc-following-arrest-and-transfer-fourth-suspect> (accessed 30 August 2024).

¹⁶ *Statement by Prosecutor Karim A.A. Khan KC on the issuance of arrest warrants against President Vladimir Putin and Ms Maria Lvova-Belova*, International Criminal Court, 17 March 2023, available at: <https://www.icc-cpi.int/news/statement-prosecutor-karim-khan-kc-issuance-arrest-warrants-against-president-vladimir-putin> (accessed 30 August 2024); G. della Morte, *I mandati di arresto della Corte penale internazionale nei confronti del Presidente della Federazione russa e del Commissario per i diritti dei fanciulli*, 3 Rivista di diritto internazionale 723 (2023), pp. 723–746; J.J. Sarkin, *Will the International Criminal Court (ICC) Be Able to Secure the Arrest of Vladimir Putin When He Travels?*, 12(1) International Human Rights Law Review 26 (2023).

¹⁷ *Situation in Ukraine: ICC judges issue arrest warrants against Sergei Ivanovich Kobylash and Viktor Nikolayevich Sokolov*, International Criminal Court, 5 March 2024, available at: <https://www.icc-cpi.int/news/situation-ukraine-icc-judges-issue-arrest-warrants-against-sergei-ivanovich-kobylash-and> (accessed 30 August 2024); F. Capone, *The Wave of Russian Attacks on Ukraine's Power Infrastructures: An Opportunity to Infuse Meaningfulness into the Notion of 'Dual-use Objects'?*, 8(2) European Papers 741 (2023), pp. 741–754; *Statement by Prosecutor Karim A.A. Khan KC on the issuance of arrest warrants in the Situation in Ukraine*, International Criminal Court, 25 June 2024, available at: <https://www.icc-cpi.int/news/statement-prosecutor-karim-aa-khan-kc-issuance-arrest-warrants-situation-ukraine-0> (accessed 30 August 2024).

¹⁸ Historical instances of environmental prosecutions can be traced back to the activity of the Nuremberg tribunal. Art. 6(2)(b) of the Nuremberg Charter classified “wanton destruction of cities, towns, or villages,

regarding the crime of genocide; Arts. 7(1)(a), 7(1)(b) and 7(1)(k), regarding crimes against humanity; and most importantly, Art. 8(2)(b)(iv) regarding war crimes are all relevant for this purpose.¹⁹ Provisions on genocide and crimes against humanity do not expressly mention the environment. Nevertheless, it is important to consider them within the present analysis since these crimes can also be committed through environmental destruction. In such instances the environment serves as a tool for inflicting harm on individuals or groups of individuals. Therefore, this analysis will mainly focus on war crimes, which expressly include crimes against the environment.

As mentioned above, environmental harm could potentially meet the elements of specific acts of genocide, such as those provided for in Art. 6(b) and (c) of the ICC Statute, dealing respectively with acts “causing serious bodily or mental harm to members of the group”; as well as with acts “deliberately inflicting on a group conditions of life calculated to bring about its physical destruction in whole or in part.” Concerning the provision outlined in Art. 6(b) of the ICC Statute, environmental destruction can inflict significant harm on communities whose ways of life, cultural practices, and means of sustenance are deeply intertwined with their natural environment. On the other hand, the ICC Elements of Crimes states that with regard to Art. 6(c) of the ICC Statute inflicting conditions of life calculated to bring about the physical destruction of a group in whole or in part “may include, but is not necessarily restricted to, deliberate deprivation of resources indispensable for survival, such as food or medical services, or systematic expulsion from homes.”²⁰ Besides one of these material elements (*actus reus*), the prosecution of genocide also requires the “specific intent (*dolus specialis*) to destroy, in whole or in part, the targeted group as such.” This requirement is particularly difficult to meet and establish, which is the reason why the ICC has never yet convicted anybody for this charge. This deadlock within the ICC may however change in the future, considering that the arrest warrant issued for Omar Al-Bashir also alleges genocide as a consequence of environmental harm; namely of the contamination of the wells and water pumps of the towns and villages primarily inhabited by members of the Fur, Masalit and Zaghawa groups which his armed forces attacked.²¹

Secondly, environmental harm may also constitute a crime against humanity if it consists of one of the acts listed in Art. 7 of the ICC Statute and is “committed

or devastation not justified by military necessity” as a war crime. In fact, under this rule the IMT convicted the German General Alfred Jödl for implementing scorched-earth policies in Norway and Russia. See Nuremberg Trial Proceedings vol. 22, 30 September 1946, Art. 517, available at: <https://avalon.law.yale.edu/imt/09-30-46.asp> (accessed 30 August 2024).

¹⁹ See M. Gillett, *Prosecuting Environmental Harm before the International Criminal Court*, Cambridge University Press, Cambridge: 2022, pp. 53–133.

²⁰ *Elements of Crimes*, International Criminal Court, Hague: 2013, Art. 6(c), footnote 4, available at: <https://www.icc-cpi.int/sites/default/files/Publications/Elements-of-Crimes.pdf> (accessed 30 August 2024).

²¹ Case information sheet of the ICC, *The Prosecutor v. Omar Hassan Ahmad Al-Bashir*, ICC-02/05-01/09, available at: <https://www.icc-cpi.int/sites/default/files/CaseInformationSheets/AlBashirEng.pdf> (accessed 30 August 2024).

as part of a widespread or systematic attack against a civilian population, with knowledge of the attack.”²² Relevant underlying acts include: murder under Art. 7(1)(a) of the ICC Statute, due to unlawful chemical usage or improper storage, for instance; extermination under Art. 7(1)(b) of the ICC Statute, perpetrated through environmental destruction for example; and other inhumane acts “intentionally causing great suffering, or serious injury to body or to mental or physical health” under Art. 7(1)(k) of the ICC Statute, such as gross toxic emissions for instance.

Finally, and most importantly, environmental harm is expressly mentioned by Art. 8(b)(iv) of the ICC Statute regarding war crimes.²³ Such a rule criminalizes the intentional launching of an attack with knowledge that such attack will cause widespread, long-term, and severe damage to the natural environment, in a manner not proportionate to the concrete and direct overall military advantage. Contrary to the other options for the prosecution of the environmental harm, Art. 8(b)(iv) of the ICC Statute does not require damage to human lives, as the object of its protection is the environment as such. One of the main elements of this crime is that the conduct has been perpetrated in the context of an armed conflict,²⁴ and “in particular (...) as part of a plan or policy or as part of a large-scale commission of such crimes” (Art. 8(1) of the ICC Statute). According to Pre-Trial Chamber II, the use of the term “in particular” clarifies that the Court is not mandated to establish the existence of such a plan, policy, or large-scale commission as a prerequisite for exercising jurisdiction over war crimes. Instead, this condition serves as a “practical guideline”.²⁵ Therefore, a single act could be considered a war crime within the Court’s jurisdiction if committed in the context of and associated with an armed conflict.²⁶

Other conditions provided by the rule find no definition – neither within the Court case law nor in other pertinent instruments. However, there are similar norms in international law, which may be very useful for the interpretation of the terms used by the ICC Statute, and which the ICC shall apply pursuant to Art. 21(1)(b) of the ICC Statute concerning the applicable law. First, Arts. 35(3) and 55 of the Additional Protocol I to Geneva Conventions relating to the Protection of Victims of International Armed Conflicts, adopted in 1977 (API),²⁷ are relevant for this purpose. On the one

²² Art. 7(1) of the Rome Statute.

²³ For a comment, see K.J. Heller, J.C. Lawrence, *The Limits of Article 8(2)(b)(iv) of the Rome Statute, the First Ecocentric Environmental War Crime*, 20 Georgetown International Environmental Law Review 1 (2007).

²⁴ *Elements of Crimes...*, *supra* note 20, Art. 8, Introduction.

²⁵ Decision Pursuant to Article 61(7)(a) and (b) of the Rome Statute on the Charges of the Prosecutor Against Jean-Pierre Bemba Gombo, ICC-01/05-01/08-424, 15 June 2009, para. 211; ICC, *The Prosecutor v. Germain Katanga*, ICC-01/04-01/07-3436-tENG, 7 March 2014, para. 896.

²⁶ Decision on the confirmation of charges to ICC, *The Prosecutor v. Callixte Mbarushimana*, ICC-01/04-01/10-465-Red, 16 December 2011, para. 94.

²⁷ Protocol additional to the Geneva Conventions of 12 August 1949, and relating to the protection of victims of international armed conflicts (Protocol I) (adopted 8 June 1977, entered into force 7 December 1978), 1125 UNTS 3.

hand, Art. 35(3) API states that “[i]t is prohibited to employ methods or means of warfare which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment.” On the other hand, Art. 55 API provides that: “Care shall be taken in warfare to protect the natural environment against widespread, long-term and severe damage (...).”²⁸ Secondly, Art. I(1) of the ENMOD Convention, which is designed to address the use of environmental modification techniques as a means of war, provides that “[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.”²⁹ While the API is aimed at protecting the natural environment against damage which could be inflicted by any weapon, the ENMOD Convention is directed at preventing the use of environmental modification techniques as a method of warfare.³⁰ Moreover, ENMOD Convention has a wider application than the API, both in terms of the nature of its requirements and of their interpretation. In fact, while the conditions imposed by the API are cumulative – just like those set forth by Art. 8(b)(iv) of the ICC Statute – the criteria imposed by the ENMOD Convention are alternative, which means that it is sufficient for one or another of these conditions to be fulfilled for the situation to fall under the prohibition provided therein.

As to the specific interpretation of Art. 8(b)(iv) of the ICC Statute, in order to constitute a war crime, the environmental harm must be caused by a specific *actus reus*, namely by an armed attack – not necessarily conducted against the environment as such – causing “widespread, long-term and severe damage to the natural environment.” Under the ENMOD Convention, the damage is “widespread” when its geographical scope is of several hundred square kilometers. It is “long-term” when the duration of the negative effects on the environment continues for several months, or approximately a season. Lastly, it is “severe” when it is of such intensity to go beyond the normal military damage.³¹ In contrast, under the API the phrase “long-term” was understood by the adopting States to mean decades,³² which sets a higher threshold to meet.³³

²⁸ For a comment, see M. Gillett, *Criminalizing Reprisals against the Natural Environment*, 105(924) *International Review of the Red Cross* 1463 (2023).

²⁹ J. Lawrence, *Negotiating a Treaty on Environmental Modification Warfare: The Convention on Environmental Warfare and Its Impact upon Arms Control Negotiations*, 32(4) *International Organization* 975 (1978).

³⁰ V. Morris, *Protection of the Environment in Wartime: The United Nations General Assembly Considers the Need for a New Convention*, 27(3) *International Lawyer* 775 (1993).

³¹ These Understandings are not incorporated into the Convention but are part of the negotiating record and were included in the report transmitted by the Conference of the Committee on Disarmament to the United Nations General Assembly in September 1976. See UNGA, *Report of the Conference of the Committee on Disarmament*, 1 January 1976, A/31/27, pp. 91–92.

³² Y. Sandoz, C. Swinarski, B. Zimmermann (eds.), *Commentary on the Additional Protocols of 8 June 1977 to the Geneva Conventions of 12 August 1949*, Martinus Nijhoff Publishers, Geneva: 1987, para. 1452; J.-M. Henckaerts, L. Doswald-Beck, *Customary International Humanitarian Law. Vol. I: Rules*, Cambridge University Press, Cambridge: 2005, p. 151.

³³ Heller, Lawrence, *supra* note 23, p. 15.

Arts. 35 and 55 API seem to be more suitable for the interpretation of Art. 8(b)(iv) of the ICC Statute, as they better reflect the conditions provided therein. Moreover, the ENMOD Convention has not acquired the status of customary international law.³⁴ In fact, as provided by the Understanding concerning Art. 1 of the ENMOD Convention, “(...) the interpretation set forth above is intended exclusively for this Convention and is not intended to prejudice the interpretation of the same or similar terms if used in connection with any other international agreement.”

The prosecution under Art. 8 also depends on the capacity of the Prosecutor to provide evidence of the required *mens rea*. As set forth by the rule, the attack must be launched “intentionally”; the perpetrator must know that the anticipated environmental harm will be widespread, long-term, and severe; and the damage must be clearly excessive in relation to the concrete and direct overall military advantage anticipated from the information known to the perpetrator at the time. These elements can be difficult to meet.

In particular, the most challenging part of such requirements relates to the proportionality test required by the final clause of the rule under discussion, to be interpreted in light of Arts. 51(5)(b) and 85(3)(b) API as the “proportionality requirement inherent in determining the legality of any military activity undertaken in the context of an armed conflict.”³⁵ According to the ICC Elements of Crimes, a crime arises when the damage to the environment is of such an extent as to be clearly excessive in relation to the foreseeable military advantage by the perpetrator at the relevant time, thus possibly referring to an advantage temporally or geographically related to the object of the attack.³⁶ The ICC Prosecutor adopted a restrictive approach in this regard, arguing that the intent of the drafters was “that a value judgment within a reasonable margin of appreciation should not be criminalized, nor second guessed by the Court based on hindsight.”³⁷ Hence, the inclusion of the proportionality test, along with the other requirements of Art. 8 of the ICC Statute, tends to reduce the possibilities of its application to real-life cases of the environmental harm. For these reasons, some scholars argue that the ICC “might not be the most effective way to sanction” environmental war crimes.³⁸

However, the ICC Elements of Crimes also envisages that “[t]he fact that this crime admits the possibility of lawful incidental injury and collateral damage does

³⁴ Y. Dinstein, *The Conduct of Hostilities under the Law of International Armed Conflict*, Cambridge University Press, Cambridge: 2016, p. 247.

³⁵ W.A. Schabas, *The International Criminal Court: A Commentary on the Rome Statute*, Oxford University Press, Oxford: 2016, p. 265.

³⁶ *Elements of Crimes...*, *supra* note 20, Art. 8(2)(b)(iv), fn 36.

³⁷ *Situation on Registered Vessels of Comoros, Greece and Cambodia. Article 53(1) Report*, Office of the Prosecutor, Hague: 2014, para. 103.

³⁸ M. Drumbl, *Waging War Against the World: The Need to Move from War Crimes to Environmental Crimes*, 22 Fordham International Law Journal 122 (1998).

not in any way justify any violation of the law applicable in armed conflict.”³⁹ This last notion encompasses not only customary international law, defined as “rules of international law” by Art. 21(1)(b) of the ICC Statute, but also principles of international law.⁴⁰ The necessity to abide by customary rules and principles of international humanitarian law entails the application, in this context, of Rule 44 of the Rules of customary international humanitarian law by the International Committee of the Red Cross of 2005 concerning the “Due regard for the natural environment in military operations.”⁴¹ This rule requires that “(...) [i]n the conduct of military operations, all feasible precautions must be taken to avoid, and in any event to minimize, incidental damage to the environment (...)” This means that States have a *due diligence* obligation to prevent environmental damages when planning and perpetrating an attack. As the potential effect of an attack on the environment is to be assessed during its planning, the “precautionary principle” may appear to be quite relevant in the evaluation of the proportionality of such attack with due regard to its collateral damage.⁴² As a consequence, the ICC might need to analyze whether the accused could have obtained the same military advantage through a military operation with lower collateral damages.

Be that as it may, among the criteria on case selection and prioritization the Office of the Prosecutor (OTP) “give[s] particular consideration to prosecuting Rome Statute crimes that are committed by means of, or that result in, *inter alia*, the destruction of the environment.”⁴³ In cases not selected, “[t]he Office will also seek to cooperate and provide assistance to States, upon request, with respect to conduct which constitutes a serious crime under national law (...) the destruction of the environment.”⁴⁴

2. UKRAINIAN JURISDICTION OVER ENVIRONMENTAL HARM IN UKRAINE

Most importantly, Ukraine has the primary jurisdiction over international crimes committed on its territory. Such jurisdiction, together with its accompanying obligations, falls upon the State parties derived from the complementarity principle set forth in Arts. 1 and 17 of the ICC Statute. According to this principle, “it is the duty of every State to exercise its criminal jurisdiction over those responsible

³⁹ *Elements of Crimes...*, *supra* note 20, Art. 8(2)(b)(iv), fn 36.

⁴⁰ O. Triffterer, *Commentary on the Rome Statute of the International Criminal Court*, Nomos Verlagsgesellschaft, Baden-Baden: 1999, p. 707.

⁴¹ Henckaerts, Doswald-Beck, *supra* note 32, p. 147.

⁴² M. Bothe, *Precaution in International Environmental Law and Precautions in the Law of Armed Conflict*, 10(1) Goettingen Journal of International Law 267 (2020).

⁴³ *Policy Paper on Case Selection and Prioritisation*, Office of the Prosecutor, Hague: 2016, para. 41.

⁴⁴ *Ibidem*, para. 7.

for international crimes.”⁴⁵ Thus, during the decision on the admissibility of the case, the ICC shall consider whether the case is being investigated or prosecuted by a willing and able State invested with jurisdiction over the same person and the same incrimination, as envisaged by Art. 17 of the ICC Statute.

Ukrainian jurisdiction also stems from international humanitarian law as such; namely from both its customary rules⁴⁶ and from the Geneva Conventions of 1949 (GC) and the API of 1977, to which Ukraine is party.⁴⁷ Accordingly, States parties shall bring those responsible of grave breaches of Geneva Conventions before their own courts, or hand them over for trial to another State which has made out a *prima facie* case (*aut dedere aut judicare*) under Art. 49 I GC,⁴⁸ Art. 50 II GC,⁴⁹ Art. 129 III GC,⁵⁰ Art. 146 IV GC⁵¹ and Art. 85(1) API. These rules also introduce the obligation of criminalization of grave breaches of the Geneva Conventions and their additional Protocols. The same is true with regard to violations of the Hague Convention for the protection of cultural property in the event of armed conflict, adopted in 1954⁵²; pursuant to Art. 28 of the Ottawa Convention on anti-personnel mines adopted in 1997⁵³; pursuant to Art. 9 of the Convention on biological weapons adopted in 1972⁵⁴; and pursuant to Art. IV and Art VIII.1 of the Convention on the prohibition of chemical weapons adopted in 1992⁵⁵. Ukraine ratified all these instruments, either as a federated State of the Ukrainian Soviet Socialist Republic, or as an independent country since

⁴⁵ See the Rome Statute, Preamble.

⁴⁶ See Rule 158 of the Rules of customary international humanitarian law by the International Committee of the Red Cross of 2005: “States must investigate war crimes allegedly committed by their nationals or armed forces, or on their territory, and, if appropriate, prosecute the suspects. They must also investigate other war crimes over which they have jurisdiction and, if appropriate, prosecute the suspects” (Henckaerts, Doswald-Beck, *supra* note 32, p. 607).

⁴⁷ For the ratification status, see Protocol additional to the Geneva Conventions of 12 August 1949..., *supra* note 27.

⁴⁸ Geneva Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field (adopted 12 August 1949, entered into force 21 October 1950), 75 UNTS 31.

⁴⁹ Geneva Convention for the Amelioration of the Condition of the Wounded, Sick and Shipwrecked Members of the Armed Forces at Sea (adopted 12 August 1949, entered into force 21 October 1950), 75 UNTS 85.

⁵⁰ Geneva Convention Relative to the Treatment of Prisoners of War (adopted 12 August 1949, entered into force 21 October 1950), 75 UNTS 135.

⁵¹ Geneva Convention Relative to the Protection of Civilian Persons in Time of War (adopted 12 August 1949, entered into force 21 October 1950), 75 UNTS 287.

⁵² Convention for the Protection of Cultural Property in the Event of Armed Conflict (adopted 14 May 1954, entered into force 7 August 1956), 249 UNTS 216.

⁵³ Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (adopted 18 September 1997, entered into force 1 March 1999), 2056 UNTS 211.

⁵⁴ Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (biological) and Toxin Weapons and on Their Destruction (adopted 10 April 1972, entered into force 26 March 1975), 1015 UNTS 165.

⁵⁵ Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (adopted 3 September 1992, entered into force 29 April 1997), 1975 UNTS 469.

24 August 1991. Moreover, the competence to prosecute foreigners responsible for international crimes is also envisaged in the Ukrainian legal framework – similarly as in those of other States – under the principle of territorial sovereignty. As stated by Art. 6 of the Criminal Code of Ukraine (CCU)⁵⁶ on the applicability of the law on criminal liability regarding crimes committed on the territory of Ukraine, any person who has committed a crime on the territory of Ukraine shall be criminally liable under this Code.

As to the Ukrainian jurisdiction *ratione materiae*, the CCU provides for a wide regulation of international crimes. In May 2021, the Ukrainian Parliament passed legislation (Bill 2689) aimed at aligning Ukrainian law more closely with international humanitarian law. This initiative facilitates the Ukrainian authorities' ability to investigate and prosecute violations of international humanitarian law within the country. Additionally, it addresses deficiencies in current national legislation that have hindered the prosecution of international crimes occurring on Ukrainian territory. Currently, the relevant rules are Art. 436 regarding war propaganda; Art. 437 regarding the planning, preparation, and waging of aggressive war; Art. 438 regarding violation of the rules of the warfare; Art. 441 regarding ecocide; and Art. 442 regarding genocide.

In order to better deal with international crimes committed in Ukraine, its authorities have launched an online platform⁵⁷ to systematically record war crimes and crimes against humanity perpetrated by the Russian army. The platform encourages individuals who have witnessed international crimes to share videos, photographs, and other pertinent information. The gathered evidence is intended to be used in proceedings against those allegedly responsible for the most heinous international crimes, both in Ukrainian courts and before the ICC. As of 29 September 2023, officials from the Ukrainian Office of the Prosecutor General report that they have documented more than 122,000 potential war crimes attributed to Russian forces.⁵⁸

To specifically address environmental crimes, such conduct may be prosecuted in Ukraine both as ordinary crimes pursuant to the Chapter VIII of the CCU⁵⁹ and as criminal offenses against the peace, security of mankind and international legal order under the Chapter XX of the CCU.

As to the crimes under the Chapter VIII of the CCU, their prosecution best fit conduct and actions perpetrated in times of peace, and normally have limited

⁵⁶ Criminal Code of the Republic of Ukraine, No. 2314-III, 1 September 2001, Art. 6, available at: https://sherloc.unodc.org/cld/uploads/res/document/ukr/2001/criminal-code-of-the-republic-of-ukraine-en_html/Ukraine_Criminal_Code_as_of_2010_EN.pdf (accessed 30 August 2024).

⁵⁷ See WarCrimes, available at: www.warcrimes.gov.ua (accessed 30 August 2024).

⁵⁸ *Ukraine Probing Over 122,000 Suspected War Crimes, Says Prosecutor*, Reuters, 23 February 2024, available at: <https://t.ly/1sdJm> (accessed 30 August 2024).

⁵⁹ See Kharytonov, Orlovskiy, Kurman, Maslova, *supra* note 8, p. 285.

consequences and low penalties.⁶⁰ On the other hand, insofar as concerns criminal offenses against the peace, security of mankind, and international legal order we may find two different options for the prosecution of conduct damaging to the environment.

First of all, Art. 438 CCU targets, among other conducts, any other violations of the rules of the warfare provided by international treaties, ratified by the Verkhovna Rada of Ukraine and providing for a term of eight to twelve years of imprisonment. Given that the armed conflict in Ukraine is of an international nature,⁶¹ Arts. 35(3) and 55 API, analyzed above, are applicable in this context.⁶²

Therefore, through the blanket reference of Art. 438 CCU to Arts. 35(3) and 55 API, conduct damaging to the environment can be punished under Ukrainian law. Such an assumption is confirmed by sentences already handed down under Art. 438 CCU. Actually, in all the cases of war crimes brought before Ukrainian judicial authorities within the context of the ongoing armed conflict, the accused persons were charged under Art. 438 CCU, mainly for unlawful killing of civilians. Moreover, in some cases the crime was ascertained in connection with the violation of international obligations, as provided by the second paragraph of Art. 438 CCU. This is what happened, for instance, in Judgment No. 760/10742/22 issued on 25 August 2022 by the Criminal Tribunal of Solomiansk.⁶³ In this decision a deputy to the platoon commander of the Russian armed forces was found guilty of conduct in violation of the prohibition of corporal punishment, torture, etc. under Art. 32 of the IV GC, namely for hooding, handcuffing, stripping, and beating three Ukrainian civilians in the village of Lubyanka (Bucha) on 10 March 2022.

3. ECOCIDE

Invoking the violation of relevant international humanitarian law rules may be not the only option for punishing those responsible for environmental harm. A second option involves verifying whether the crime of ecocide can be introduced in international criminal law, and whether it already exists under Ukrainian law.

⁶⁰ With the exception of destruction or impairment of forests, which is punished by imprisonment for a term of five to ten years in cases where it caused death of people, mass destruction of animals, or any other grave consequences under Art. 245. See S.A. Tryzno, Y.M. Kolodii, K.Y. Mykolaivna, *Consequences for the Environment from Russian Aggression in Ukraine*, 99 Journal of Eastern European Law 37 (2022), pp. 37–45.

⁶¹ A. Szpak, *Legal Classification of the Armed Conflict in Ukraine in Light of International Humanitarian Law*, 58(3) Hungarian Journal of Legal Studies 261 (2017).

⁶² Which should be understood in the widest sense to cover the biological environment in which a population is living, as highlighted by the Commentary of 1987 by the International Committee of the Red Cross.

⁶³ Criminal Division of the Tribunal of Solomiansk, Judgment of 25 August 2022, No. 760/10742/22, available at: www.reyestr.court.gov.ua (accessed 30 August 2024).

The term ecocide first emerged in the 1970s, primarily in the context of the Vietnam War, when Professor Falk suggested the need for an International Convention on the Crime of Ecocide in 1973.⁶⁴ In fact, the United States military's use of chemical warfare and its impact on the environment in Vietnam prompted discussions on whether such conduct could be qualified as ecocide.⁶⁵

More recently, international law scholars reignited the debate on ecocide. Some authors argued that the solution would be the creation of a special international convention regarding the crime of ecocide, with its own international court dealing with the international criminal liability of individuals.⁶⁶ At the same time, however, there also has been a proposal to introduce ecocide into the ICC Statute. In particular, the Stop Ecocide Foundation convened an Independent Expert Panel for the Legal Definition of Ecocide,⁶⁷ which delivered its official proposal on the definition of the crime of ecocide to the Assembly of States Parties to the ICC during its 20th Session in June 2021.⁶⁸ The proposal consisted mainly of a new Art. 8^{ter}, which would add the core crime of ecocide to the ICC Statute. The drafters defined this crime as the commission of "unlawful or wanton acts 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."⁶⁹ This is very similar to the environmental war crime discussed previously under Art. 8(b)(iv) of the ICC Statute, which however is punishable only if committed during an armed conflict. Hence, the proposal would extend the crime of ecocide to include times of peace.

However, this amendment to the ICC Statute has not been taken into consideration yet,⁷⁰ and there is currently no general State practice that univocally con-

⁶⁴ R.A. Falk, *Environmental Warfare and Ecocide – Facts, Appraisal, and Proposals*, 4(1) Bulletin of Peace Proposals 80 (1973).

⁶⁵ A. Jain, C. Soni, *Ecocide: A New International Crime*, 2(2) Jus Corpus Law Journal 627 (2021), pp. 627–634; A.M. Hanna, *Killing Our Home: The Case for Creating an International Crime of Ecocide*, 6 Social Justice and Equity Law Journal 2 (2023).

⁶⁶ Jain, Soni, *supra* note 65, pp. 633; D.A.B. Neto, T.C.F. Mont' Alverne, *Ecocide: Criminalizing Policy of International Environmental Crimes or a Crime Itself*, 8(1) Brazilian Journal of Public Policy 209 (2018), pp. 209–226; D. Singh Yadav, *Ecocide: The Missing Convention*, 5 International Journal of Law Management & Humanities 445 (2022).

⁶⁷ *June 2021: historic moment as Independent Expert Panel launches definition of ecocide*, Stop Ecocide International, 22 June 2021, available at: <https://www.stopecocide.earth/legal-definition> (accessed 30 August 2024).

⁶⁸ For a comment, see C.T. Banungana, *Vers l'intégration de l'écocide dans le Statut de Rome*, 59 The Canadian Yearbook of International Law 233 (2021).

⁶⁹ K. Ambos, *Protecting the Environment through International Criminal Law?*, EJIL: Talk!, 29 June 2021, available at: <https://www.ejiltalk.org/protecting-the-environment-through-international-criminal-law/> (accessed 30 August 2024).

⁷⁰ On the urgency to create an international crime of ecocide see M.A. Gray, *The International Crime of Ecocide*, 26(2) California Western International Law Journal 215 (1996).

siders ecocide to be a crime under customary international law.⁷¹ Moreover, there are significant drawbacks associated with focusing attention on the ICC. The Court is presently grappling with an overwhelming caseload and operational challenges related to the existing crimes within its jurisdiction. Also, the ICC Statute sets stringent amendment thresholds, and meeting these thresholds may prove particularly difficult in the current global context. Thus, the likelihood of the ICC addressing ecocide cases in near future is minimal.⁷² In any case, considering that the proposal would extend the jurisdiction of the Court over environmental harm to include violations during peacetime, it wouldn't represent a viable option for the environmental crimes committed in Ukraine, since they have been committed during wartime.

On the other hand, the CCU – like the national legislations of Vietnam,⁷³ Russia,⁷⁴ Belgium,⁷⁵ India,⁷⁶ Georgia,⁷⁷ and of many other countries – is more advanced on this matter. In fact, Art. 441 CCU expressly codifies the crime of ecocide, stating that “[m]ass destruction of flora and fauna, poisoning of air or water resources, and also any other actions that may cause an environmental disaster shall be punishable by imprisonment for a term of eight to fifteen years.”⁷⁸

Evaluation of the conditions required for the assessment of this crime will involve such elements as the vastness of the territory involved; the duration of adverse changes in the environment; substantial negative changes in the ecological system (such as the disappearance of certain species of animals and plants), as well as

⁷¹ J. de Hemptinne, *Ecocide: An Ambiguous Crime?*, EJIL: Talk!, 29 August 2022, available at: <https://www.ejiltalk.org/ecocide-an-ambiguous-crime/> (accessed 30 August 2024).

⁷² D. Robinson, *Ecocide – Puzzles and Possibilities*, 20 *Journal of International Criminal Justice* 313 (2022), pp. 313–347; J. Panigaj, E. Bernikova, *Ecocide – A New Crime under International Law?*, 13(1) *Juridical Tribune* 5 (2023).

⁷³ Vietnam Criminal Code, No. 100/2015/QH13, 27 November 2015, Art. 278, available at: <https://www.wipo.int/edocs/lexdocs/laws/en/vn/vn086en.pdf> (accessed 30 August 2024).

⁷⁴ O.Y. Grechenkova, *Certain Problems of Fighting Ecocide*, 8(3) *Journal of Advanced Research in Law and Economics* 821 (2017).

⁷⁵ See *Belgium One Step Closer to Ecocide Law*, Stop Ecocide International, 21 July 2023, available at: <https://t.ly/p3Uny> (accessed 30 August 2024).

⁷⁶ I. Liao, T. Pranav, *The Criminalisation of Ecocide – An Indian Perspective*, 7(2) *NUJS Journal of Regulatory Studies* 52 (2022).

⁷⁷ Criminal Code of Georgia, No. 2287, 22 July 1999, Art. 409, available at: <https://matsne.gov.ge/en/document/view/16426?publication=262> (accessed 30 August 2024).

⁷⁸ For the purposes of this norm, the mass destruction of plant or animal life of the world means their complete or partial extermination on a certain territory of the Earth, and poisoning of the atmosphere or water resources involves spreading in the air or water a high number of poisonous substances of biological, radioactive, or chemical origin, which can cause severe forms of illness and even death in people. Similar norms are also provided for by Art. 169 of the Criminal Code of Kazakhstan (The Criminal Code of Republic of Kazakhstan, No. 167, 16 July 1997, available at: <https://www.warnathgroup.com/wp-content/uploads/2015/03/Kazakhstan-Criminal-Code.pdf> (accessed 30 August 2024)) and Art. 131 of the Criminal Code of Belarus (Criminal Code of the Republic of Belarus, No. 275-Z, 9 July 1999, available at: <https://cis-legislation.com/document.fwx?rgn=1977> (accessed 30 August 2024)).

significant restrictions or exclusions of human activity or the life of plants or animals in a certain territory.⁷⁹ Thus, also under this domestic rule the damage should be widespread. However, these conditions have not prevented the opening of more than 15 investigations in Ukraine into ecocide as of 28 November 2023,⁸⁰ although these investigations have not been concluded yet. Thus, Ukrainian case-law on the crime of ecocide is currently nonexistent.

4. THE BOMBING OF THE KAKHOVKA DAM

The most large-scale warfare event to consider, either under the category of ecocide or as an international war crime against the environment, is the alleged destruction of the Kakhovka hydroelectric dam on 6 June 2023.⁸¹ The dam was situated across the Dnipro River, serving the dual purpose of generating electricity and storing fresh water, with a portion allocated for supplying Crimea. This incident led to severe flooding of an extended area along the lower Dnipro River and to 58 deaths.⁸² As reported by United Nations Environment Programme (UNEP):

[t]he immense flood caused losses in natural habitats, plant communities and species by washing away specimens, inundating habitats and depositing debris and sediments (...) The event led to the release of hazardous chemical pollutants (...) The total amount of disaster waste is estimated to reach at least two million m³, with the majority generated on the southern side of the river. The breadth of the damage shows that they are massive

⁷⁹ V.O. Ukolova, Y.O. Ukolova, *The Problem of Ecocide as an Environmental Crime: Ukrainian and International Experience*, (10) Judicial Scientific Electronic Journal 353 (2021), pp. 353–356. On the interpretation of Art. 441, see also O.M. Shumilo, *Prospects of Determining the International Criminal Court Jurisdiction Regarding Ecocide*, 5 Current Issues in Domestic Jurisprudence 106 (2021), pp. 106–112.

⁸⁰ *Ukraine Investigates Over 270 War Crimes Against Environment*, Rubryka, 28 November 2023, available at: <https://t.ly/r8lwL> (accessed 30 August 2024); *International Crimes in Ukraine: an Overview of National Investigation and Judicial Practice*, USAID, Kyiv: 2023, p. 37. See also, statements of the Special Advisor on environmental crimes to the Ukrainian Prosecutor – General, Maksym Popov, as reported in the article *Kakhovka Dam: Ukraine Pioneers Prosecution for Ecocide*, JusticeInfo.Net, 10 July 2023, available at: <https://www.justiceinfo.net/en/119148-kakhovka-dam-ukraine-pioneers-prosecution-ecocide.html> (accessed 30 August 2024); N. Malysheva, *International Environmental Crimes of the Russian Federation on the Territory of Ukraine and the Prospects of Criminal Responsibility for Their Committing*, 1 Law Review of Kyiv University of Law 233 (2022).

⁸¹ L. Poltronieri Rossetti, *Crimini di guerra ambientali e competenza della Corte penale internazionale: quali prospettive di fronte alla distruzione della diga di Nova Kakhovka?*, 4 Rivista di diritto internazionale 1110 (2023), pp. 1110–1119; A. Gurmendi, *Tracking State Reaction to the Destruction of the Kakhovka Dam*, OpinioJuris, 20 June 2023, available at: <https://opiniojuris.org/2023/06/20/tracking-state-reactions-to-the-destruction-of-the-kakhovka-dam/> (accessed 30 August 2024).

⁸² *Russia's war on Ukraine: High environmental toll*, Think Tank European Parliament, 19 July 2023, available at: [https://www.europarl.europa.eu/thinktank/en/document/EPRS_ATA\(2023\)751427](https://www.europarl.europa.eu/thinktank/en/document/EPRS_ATA(2023)751427) (accessed 30 August 2024): “The destruction of the Kakhovka Dam further increased the harm inflicted on nature, while bringing international attention to the environmental dimension of the war.”

in size, particularly in the area of ecosystems and habitats, with corresponding impacts on species and biodiversity.⁸³

The international community has strongly criticized the Russian armed forces allegedly responsible for the incident under discussion. The Organization for Security and Co-operation in Europe (OSCE) stressed, in its Vancouver declaration adopted on 4 July 2023, that it is:

[e]xtremely concerned by the destruction of the Nova Kakhovka Dam by the Russian occupying forces (...) and convinced that the Russian Federation should be held accountable and all perpetrators punished (...) [and] denounces this act as a crime of ecocide and calls on the parliaments of OSCE participating States to enshrine this concept in national and international law.⁸⁴

On the other hand, Parliamentary Assembly of the Council of Europe stated in Resolution 2506 on “Political consequences of the Russian Federation’s war of aggression against Ukraine”, adopted on 22 June 2023, that “[t]his attack, aimed at delaying the Ukrainian counteroffensive, confirms the barbarism of Putin’s war machinery and constitutes both a war crime and ecocide.”⁸⁵ Finally, the European Parliament also adopted a strong position in its resolution “On the Sustainable Reconstruction and Integration of Ukraine into the Euro-Atlantic Community” of 15 June 2023, where it declared that it “[c]ondemns in the strongest possible terms the destruction by Russia of the Kakhovka dam (...) all those responsible for such war crimes, including the destruction of the dam, will be held accountable in line with international law.”⁸⁶

Under the API, dams benefit from a special protection, both as objects indispensable to the survival of the civilian population pursuant to Art. 54, and as works and installations containing dangerous forces pursuant to Art. 56.⁸⁷ Specifically, under Art. 54(5) API, States may derogate from such protection with regard to objects

⁸³ See *Flood Rescuers Press On in Southern Ukraine After Dam Disaster*, The New York Times, 7 July 2023, available at: <https://www.nytimes.com/live/2023/06/07/world/russia-ukraine-news> (accessed 30 August 2024); J. Waterhouse, T. Mackintosh, *Ukraine Dam: Dislodged Mines a Major Concern as Residents Flee Kherson*, BBC, 8 June 2023, available at: <https://www.bbc.com/news/world-europe-65835742> (accessed 30 August 2024).

⁸⁴ Vancouver Declaration and Resolutions adopted by the OSCE Parliamentary Assembly, Vancouver, 30 June–4 July 2023, chapter I, Arts. 7 and 35.

⁸⁵ PACE Resolution of 22 June 2023 on Political consequences of the Russian Federation’s war of aggression against Ukraine, No. 2506(2023).

⁸⁶ European Parliament resolution of 15 June 2023 on the sustainable reconstruction and integration of Ukraine into the Euro-Atlantic community, 2023/2739(RSP), para. H(4).

⁸⁷ R. Bartels, *The Relationship between the Law of Armed Conflict and International Criminal Law: With a Focus on the War in Ukraine*, 56(1) Texas Tech Law Review 39 (2023).

located on the territory under their own control only when required by imperative military necessity. Therefore, even if the dam was located on the territory under Russian *de facto* control, which is debated, it appears difficult to envisage an imperative military necessity, considering that the purpose of the attack was to delay the counteroffensive of the Ukrainian military forces. On the other hand, Art. 56 API prohibits targeting dams as military objectives, unless they are “used for other than [their] normal function and in regular, significant and direct support of military operations and if such attack is the only feasible way to terminate such support.” This was certainly not the case with the Kakhovka dam, which was presumably located on territory contested between the Russian and Ukrainian armed forces.

Meanwhile in Ukraine – as reported by the Telegram channel of its General Prosecutors’ office, Andriy Kostin, on 6 June 2023 – a criminal proceeding under Art. 441 CCU for the bombing of the Kakhovka Dam has been officially opened.⁸⁸ At the same time, the application of Art. 8(2)(b)(iv) of the ICC Statute remains more difficult, for several reasons.

First, the conduct that led to the destruction of the dam must be characterized as an “attack” under international humanitarian law, namely under Art. 49(1) API. This rule shall be considered by the ICC in proceedings concerning war crimes, since API – as it has been stated previously – is an “applicable” treaty during international armed conflicts, thus being among the sources the Court shall apply in its decisions under Art. 21(2) of the ICC Statute.⁸⁹ Art. 49(1) API states that “[a]ttacks” means acts of violence against the adversary, whether in offence or in defence”, intended as a combat action *strictu sensu*.⁹⁰ Moreover, the commentary on the API clarifies that “[i]n addition, it should be noted that destructive acts undertaken by a belligerent in his own territory would not comply with the definition of attack given in paragraph 1, as such acts, though they may be acts of violence, are not mounted “against the adversary”.⁹¹ For the purpose of the application of this rule, the notion of territory concerns those territories that are under the *de facto* control of a party to an armed conflict.⁹² If the dam was located within territory under the control of Russian armed forces, it could be difficult to consider its bombing as an attack.⁹³

⁸⁸ F. Petit, *Kakhovka Dam: Ukraine Pioneers Prosecution for Ecocide*, JusticeInfo.Net, 10 July 2023, available at: <https://t.ly/sVmkC> (accessed 30 August 2024); A.S. Bowen, M.C. Weed, *War Crimes in Ukraine*, Congressional Research Service Report, 16 October 2023, available at: <https://crsreports.congress.gov/product/pdf/R/R47762>; *Ecocide in Ukraine Won't Go Unpunished. United for Justice. United for Nature, EUAM-Ukraine*, Washington: 2023, available at: <https://shorturl.at/pswHV> (accessed 30 August 2024).

⁸⁹ Triffterer, *supra* note 40, p. 704.

⁹⁰ Sandoz, Swinarski, Zimmermann, *supra* note 32, para. 1880.

⁹¹ *Ibidem*, para. 1890.

⁹² *Ibidem*, para. 1889.

⁹³ M. Milanovic, *The Destruction of the Nova Kakhovka Dam and International Humanitarian Law: Some Preliminary Thoughts*, EJIL: Talk!, 6 June 2023, available at: <https://shorturl.at/CFITZ> (accessed 30 August 2024).

However, as already highlighted, the dam could also be situated in a contested area serving as a frontline.⁹⁴ In such a case, considering that for the purpose of application of Art. 8 of the ICC Statute the term “attack” means “combat action”,⁹⁵ the rule under discussion seems to apply.⁹⁶

Second, the event must have caused widespread, long-term and severe damage to the natural environment. It appears quite undebatable that the damage caused by the destruction of the dam was widespread and severe, as the affected area extends, according to estimates, over several tens of thousands of hectares.⁹⁷ Moreover, as detailed in various reports the destruction of the dam caused serious detriment to safety and human life, various categories of property, as well as the integrity of ecosystems and important natural resources.⁹⁸ With regard to the duration of the damage, it is necessary to determine whether to use the broader interpretation, i.e. in terms of months or seasons; or the stricter one, in terms of decades, as suggested by Arts. 35 and 55 API. In any case, we can reasonably presume that some consequences of the dam’s destruction will have an irreversible environmental impact.⁹⁹

Third, the criminal liability for war crime against the environment, as envisaged by the ICC Statute, can be established only if the attack that caused environmental damage was intentionally launched with knowledge of causing the required type of harm.¹⁰⁰ It is thus necessary to exclude that the destruction of the dam can be attributed to the negligent conduct of those who had control over it; i.e. the perpetrators must have acted intentionally. Considering that the dam’s destruction was aimed at impeding the on-field progress of the Ukrainian armed forces, the evidence of this purpose may be helpful to prove the existence of the required *mens rea*.

Finally, the application of Art. 8(2)(b)(iv) of the ICC Statute requires an evaluation of the proportionality between the damage caused by the attack and the anticipated military advantage at the time of the decision to launch it. In particular,

⁹⁴ M. Gillett, *The Kakhovka Dam and Ecocide*, Verfassungsblog, 3 July 2023, available at: <https://verfassungsblog.de/the-kakhovka-dam-and-ecocide/> (accessed 30 August 2024).

⁹⁵ ICC, *The prosecutor v. Bosco Ntaganda*, ICC-01/04-02/06 A A2, 30 March 2021, para. 1164.

⁹⁶ Gillett, *supra* note 19.

⁹⁷ P. Polityuk, *Ukraine Warns over Impact of Kakhovka Dam Collapse on Farmland*, Reuters, 7 June 2023, available at: <https://www.reuters.com/world/europe/ukraine-warns-over-impact-kakhovka-dam-collapse-farmland-2023-06-07/> (accessed 30 August 2024).

⁹⁸ *Downstream Impact: Analysing the Environmental Consequences of the Kakhovka Dam Collapse*, Conflict and Environment Observatory, 28 July 2023, available at: <https://ceobs.org/analysing-the-environmental-consequences-of-the-kakhovka-dam-collapse/> (accessed 30 August 2024).

⁹⁹ *Rapid Environmental Assessment of Kakhovka Dam Breach Ukraine*, UN Environment Programme, Nairobi: 2023, p. 74, available at: <https://shorturl.at/mrAJ9>; C. Baraniuk, *The Kakhovka Dam Collapse Is an Ecological Disaster*, Wired, 8 June 2023, available at: <https://www.wired.com/story/kakhovka-dam-flooding-ukraine/> (accessed 30 August 2024); *Blowing up the Kakhovka Dam: How Russian Terror Will Damage Ukraine’s Ecology*, Visit Ukraine, 11 June 2023, available at: <https://visitukraine.today/blog/2023/blowing-up-the-kakhovka-dam-how-russian-terror-will-damage-ukraines-ecology> (accessed 30 August 2024).

¹⁰⁰ G. Werle, F. Jeßberger, *Principles of International Criminal Law*, Oxford University Press, Oxford: 2020, p. 548.

the rule sets forth the threshold of a clear, or manifest, disproportionality for the international crime to have taken place.¹⁰¹ Such an assessment is the most difficult one, as it implies consideration of all the factual conditions surrounding the attack in order to evaluate the balance of interests made by the accused actors. As outlined in the Commentary to Art. 51 API regarding the proportionality requirement, “the disproportion between losses and damages caused and the military advantages anticipated raises a delicate problem; in some situations, there will be no room for doubt, while in other situations there may be reason for hesitation. In such situations the interests of the civilian population should prevail, as stated above.”¹⁰² It is debatable whether the same considerations could be made concerning the protection of the natural environment, given the highly anthropocentric structure of the ICC Statute, and more generally of international criminal law. In any case, it is evident that the destruction of the dam provided a military advantage to Russia, particularly in its effort to impede the Ukrainian offensive. As suggested, the dam’s destruction by Russian armed forces was an “instinctive defensive response to the threat of an amphibious attack in the Kherson oblast on the Dnipro”,¹⁰³ thus making it more challenging for Ukraine to mount an assault in the Kherson region. However, at the same time the catastrophe resulting from the dam’s destruction constitutes one of the most significant incidents, both in human and environmental terms, since the beginning of the war in Ukraine,¹⁰⁴ as it caused incalculable damage to the environment.¹⁰⁵ Hence it is highly likely that such damages may be considered as disproportionate to the aforementioned military advantage, especially considering the application of the precautionary principle.¹⁰⁶

Be that as it may, the representatives of the OTP visited the damaged area soon after the bombing of the dam, thus benefiting from the permanent presence of the OTP on the territory of Ukraine after the establishment of its country office in the

¹⁰¹ K. Ambos, *Rome Statute of the International Criminal Court*, Bloomsbury Publishing, London: 2022, p. 428; Werle, Jeßberger, *supra* note 100, p. 545 f. See also, *Final Report to the Prosecutor by the Committee Established to Review the NATO Bombing Campaign Against the Federal Republic of Yugoslavia*, United Nations International Criminal Tribunal for the former Yugoslavia, para. 21, available at: <https://www.icty.org/en/press/final-report-prosecutor-committee-established-review-nato-bombing-campaign-against-federal> (accessed 30 August 2024).

¹⁰² Sandoz, Swinarski, Zimmermann, *supra* note 32, para. 1979.

¹⁰³ D. Sabbagh, A. Mazhulin, J. Borger, *The Disastrous Bursting of Ukraine’s Nova Kakhovka Dam – and the Battle that is to Come*, The Guardian, 10 June 2023, available at: <https://shorturl.at/mtuE0> (accessed 30 August 2024).

¹⁰⁴ A. Maroonian, *Ukraine Symposium – Destruction of the Kakhovka Dam: Disproportionate and Prohibited*, Lieber Institute West, 29 June 2023, available at: <https://lieber.westpoint.edu/destruction-kakhovka-dam-disproportionate-prohibited/> (accessed 30 August 2024).

¹⁰⁵ K. Anderson, *What the Destruction of Kakhovka Dam Means for the Environment*, Greenly Blog, 21 June 2023, available at: <https://greenly.earth/en-us/blog/ecology-news/what-the-destruction-of-kakhovka-dam-means-for-the-environment> (accessed 30 August 2024).

¹⁰⁶ S. Joubert, *Can Crimes of Ecocide Committed during the Conflict in Ukraine Be Legally Punished?*, 28 Law & World 108 (2023).

agreement signed between the Court and Ukraine on 23 March 2023.¹⁰⁷ However, the OTP has not yet issued any statement concerning the specific proceeding under Art. 8(2)(b)(iv) of the ICC Statute.¹⁰⁸

Finally, two other options for prosecuting this incident – and environmental harm more generally – also exist; namely prosecution by third States under the principle of universal jurisdiction, and the establishment of an international *ad hoc* tribunal. Even though they fall outside the scope of this article, it is worth briefly mentioning them. As to the first option, not all domestic legal systems provide for universal jurisdiction.¹⁰⁹ Some States are more inclined to exercise it than others. For instance, under Section 1, sentence 1 of the Code of Crimes against International Law of Germany (*Völkerstrafgesetzbuch*), the principle of universal jurisdiction applies to all core crimes outlined in its Sections 6 to 12,¹¹⁰ even if the offense has no connection to Germany.¹¹¹ In reliance on this principle both German and many other¹¹² judicial authorities have initiated investigations into alleged atrocities committed by Russian forces in Ukraine. However, in carrying out such investigations no mention has been made with regard to environmental harm.¹¹³

On the other hand, the international special tribunal for Ukraine may in fact offer another avenue for holding accountable those responsible for the destruction of the Kakhovka dam. Currently, this debate primarily revolves around the establishment of the Special Tribunal against the Crime of Aggression,¹¹⁴ with no mention made of

¹⁰⁷ See *Ukraine and the International Criminal Court sign an agreement on the establishment of a country office*, International Criminal Court, 23 March 2023, available at: <https://www.icc-cpi.int/news/ukraine-and-international-criminal-court-sign-agreement-establishment-country-office> (accessed 30 August 2024).

¹⁰⁸ B. Babin, O. Plotnikov, A. Prykhodko, *Damage to the Maritime Ecosystems from the Destruction of the Kakhovka Dam and International Mechanisms of Its Assessment*, 9(5) *Lex Portus* 23 (2023).

¹⁰⁹ Henckaerts, Doswald-Beck, *supra* note 32, p. 607.

¹¹⁰ Code of Crimes against International Law, No. 255, 26 June 2002, section 1, sentence 1, available at: https://www.gesetze-im-internet.de/englisch_vstgb/englisch_vstgb.html (accessed 30 August 2024).

¹¹¹ *Ibidem*.

¹¹² See, among others, R. Fraňková, *Czech Police Investigating Possible War Crimes in Ukraine*, Radio Prague International, 20 April 2022, available at: <https://english.radio.cz/czech-police-investigating-possible-war-crimes-ukraine-8748207> (accessed 30 August 2024); *Statement by Estonia at Security Council Arria-formula Meeting on Ensuring Accountability for Atrocities Committed in Ukraine*, Permanent Mission of Estonia to the UN 27 April 2022, available at: <https://un.mfa.ee/statement-by-estonia-at-security-council-arria-formula-meeting-on-ensuring-accountability-for-atrocities-committed-in-ukraine/> (accessed 30 August 2024); *Guerre en Ukraine: la France ouvre trois nouvelles enquêtes pour «crimes de guerre»*, Le Soir, 5 April 2022, available at: <https://www.lesoir.be/434351/article/2022-04-05/guerre-en-ukraine-la-france-ouvre-trois-nouvelles-enquetes-pour-crimes-de-guerre> (accessed 30 August 2024).

¹¹³ B. Pancevski, *Germany Opens Investigation into Suspected Russian War Crimes in Ukraine*, The Wall Street Journal, 8 March 2022, available at: <https://www.wsj.com/livecoverage/russia-ukraine-latest-news-2022-03-08/card/germany-opens-investigation-into-suspected-russian-war-crimes-in-ukraine-bNCphaIWE30f2REH8BCi> (accessed 30 August 2024).

¹¹⁴ O. Corten, V. Koutroulis, *Tribunal for the Crime of Aggression against Ukraine – A Legal Assessment*, European Parliament, Bruxelles: 2022; A. Komarov, O.A. Hathaway, *The Best Path for Accountability for*

its other potential competencies *ratione materiae*. The main reason for this focus is that the crime of aggression is the only international crime for which the ICC lacks jurisdiction in the armed conflict between Ukraine and Russia. In fact, Russia has not ratified the ICC Statute, which is the main requirement for the prosecution of its nationals for aggression under Art. 15*bis*(5) of the ICC Statute. Thus, even though the statute of such tribunal would cover the crime of ecocide, as has been argued previously, the proposed notion of ecocide would simply replicate the notion of the war crime against the environment, set forth in Art. 8(2)(iv) of the ICC Statute. Therefore, establishing an *ad hoc* tribunal with jurisdiction on environmental harm would not only be redundant, but also conflict with the jurisdiction of the ICC.

CONCLUSIONS

Ukraine is the green heart of Europe, and the ongoing armed conflict brought on by the Russian aggression has heavily affected its environment. Therefore, it is of the utmost importance to bring to justice those responsible for crimes against the environment committed in Ukraine, and especially for the bombing of the Kakhovka dam which occurred on 6 June 2023.

There are two main options for the prosecution of those responsible for the environmental crimes committed during the armed conflict between Ukraine and Russia. First, the ICC can bring to justice individuals under Arts. 6(b) and 6(c) regarding genocide; Arts. 7(1)(a), 7(1)(b) and 7(1)(k), regarding crimes against humanity; and most importantly Art. 8(2)(b)(iv) regarding war crimes of the ICC Statute. While genocide and crimes against humanity focus on the harm inflicted on individuals through means of causing environmental damage, the most important option is presented by war crimes committed against the environment under Art. 8(2)(b)(iv) of the ICC Statute. In this case, prosecution is possible if the attack against the natural environment has been committed intentionally and caused widespread, long-term and severe damage, which is disproportionate to the military advantage obtained. This sets a high threshold for prosecution¹¹⁵, and all these requirements

the Crime of Aggression Under Ukrainian and International Law: a Treaty Between Ukraine and the UN General Assembly Is the Way to Proceed, Just Security, 11 April 2022, available at: <https://www.justsecurity.org/81063/the-best-path-for-accountability-for-the-crime-of-aggression-under-ukrainian-and-international-law/> (accessed 30 August 2024); K. Ambos, *A Ukraine Special Tribunal with Legitimacy Problems?*, Verfassungsblog, 6 January 2023, available at: <https://verfassungsblog.de/a-ukraine-special-tribunal-with-legitimacy-problems/> (accessed 30 August 2024); C. Stahn, *From “Uniting for Peace” to “Uniting for Justice?”: Reflections on the Power of the UN General Assembly to Create Criminal Tribunals or Make Referrals to the ICC*, 55(1) Case Western Reserve Journal of International Law 251 (2023), pp. 251–186; K. Gavrysh, *Tribunale internazionale speciale sul crimine di aggressione contro l’Ucraina: prospettive e criticità*, 1 Rivista di diritto internazionale 209 (2024).

¹¹⁵ M.O. Medvedieva, *Responsibility for the Environmental Damage Caused During the Armed Conflict*

present serious challenges for the Prosecutor. But at least these requirements seem to be met with regard to the bombing of the Kakhovka dam, considering that the gravity of the consequences deriving from this incident is undebatable, as reported by multiple press articles. In fact, whether the dam was located on the territory under the *de facto* control of Russian armed forces or in a contested area is irrelevant under international humanitarian law. Moreover, as reported by the Ukrainian President Vladimir Zelensky, the ICC should have already opened an investigation into the incident.¹¹⁶ However, as of now there has been any official communication in this regard from the Court itself.

The second – and perhaps most important – possibility is to initiate domestic proceedings under Ukrainian legislation, either for international war crimes under Art. 438 CCU or ecocide under Art. 441 CCU. Both options are actually viable despite the ongoing conflict. In fact, the domestic courts located outside the occupied territories or areas of active hostilities regularly continue their work, while those situated in occupied territories have been relocated to cities under governmental control. Thus, Ukraine has an intact judicial system: investigators have had nearly immediate access to crime scenes and evidence; and Ukraine is holding several hundred Russian prisoners of war, some of whom are, or probably will be, suspected of the war-crimes under investigation.¹¹⁷ Also, Ukrainian authorities have opened a web platform to properly document the war crimes and crimes against humanity committed by the Russian army in Ukraine.¹¹⁸ In fact, the integrity of the Ukrainian judicial system has allowed its authorities to open a proceeding in relation to the destruction of the Kakhovka Dam under the Art. 441 CCU, which enshrines the crime of ecocide, and within which they will probably cooperate with OTP and other countries through the joint investigation team set up concerning the alleged core international crimes committed in Ukraine.¹¹⁹

Finally, two other options might be useful – namely the exercise of universal jurisdiction by other States not involved in the armed conflict between Russia and Ukraine, and the establishment of an international *ad hoc* tribunal. However, these

Between Ukraine and the Russian Federation: Opportunities in the Algorithm of Protecting National Interests, 139 Actual Problems of International Relations 58 (2019).

¹¹⁶ *International Criminal Court Starts Investigation into Destroyed Nova Kakhovka Dam*, Kyiv Independent, 12 June 2023, available at: <https://kyivindependent.com/international-criminal-court-starts-investigation-into-destroyed-nova-kakhovka-dam-2/> (accessed 30 August 2024); R. Gigova, *Russia is Accused of “Ecocide” in Ukraine. But What Does That Mean?*, CNN World, 3 July 2023, available at: <https://t.ly/rA4iH> (accessed 30 August 2024).

¹¹⁷ M. Gessen, *The Prosecution of Russian War Crimes in Ukraine*, The New Yorker, 1 August 2022, available at: <https://www.newyorker.com/magazine/2022/08/08/the-prosecution-of-russian-war-crimes-in-ukraine> (accessed 30 August 2024).

¹¹⁸ WarCrimes, *supra* note 57.

¹¹⁹ Gray, *supra* note 70.

avenues currently appear less relevant with regard to the bombing of the Kakhovka dam and, more generally, to environmental crimes.

Therefore, it is reasonable to conclude that all the prerequisites exist – both from a regulatory perspective and in terms of operational capacity – to gather the necessary evidence, and that not only the Ukrainian Prosecutor but also the General Prosecutor of the ICC can investigate the destruction of the Kakhovka dam.¹²⁰ It remains to be seen whether this will actually happen, and whether the ICC will declare the case admissible, taking into consideration that a proceeding is already pending before the Ukrainian judicial authorities.¹²¹

¹²⁰In the same vein, see T. Dannenbaum, *What International Humanitarian Law Says About the Nova Kakhovka Dam*, Lawfare, 12 June 2023, available at: <https://www.lawfaremedia.org/article/the-destruction-of-the-nova-kakhovka-dam-and-the-heightened-protections-of-additional-protocol-i> (accessed 30 August 2024).

¹²¹It is worth mentioning that it has been reported that the representatives of the ICC visited the flooded areas in June, see Petit, *supra* note 88.