

Challenges for Biodiversity Protection Stemming from Border Walls in Slovenia and Korea

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Abstract: The proliferation of border walls around the world, including in European Union territory, is a fact. Their construction can have harmful and irreparable consequences for biodiversity and ecosystems. This paper analyses the construction of the border fence between Slovenia and Croatia, paying special attention to the violations of European and international law and to the harm caused to the biodiversity of the Dinaric Alps region. It will also look at the singular case of the demilitarized zone between North and South Korea, which, because it has been free of human interference for more than sixty years, has enabled wildlife to thrive and the establishment of a unique ecosystem in the world. The challenge for international law is thus twofold: to ensure the conservation and protection of biodiversity without compromising the peace process or a hypothetical reunification.

Keywords: biodiversity transboundary cooperation endangered species border wall border fence Slovenia Korea

(A) INTRODUCTION

Today, there is a consensus in the literature regarding the need and importance of promoting, implementing and strengthening transboundary cooperation between states. However, states have begun to call this paradigm into question, due to the security challenges they have faced since 2001: the fight against terrorism, organized crime or migratory crises in a context of economic crisis and a crisis of institutional representation. The 'securitization' of phenomena such as migration has hindered the fulfilment of the assumptions underlying the transboundary cooperation paradigm.

Transboundary protection of biodiversity has also been affected by the spread of border walls and fences around the world, including in European Union (EU) territory. Their construction is a barrier to the conservation of biodiversity, whilst their direct consequences for habitats are, in most cases, irreversible. This spread of threats to habitats and protected species flies in the face of the recommendations of the

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¹ Term coined by the Copenhagen School. Some of the most interesting studies on the securitization of international relations include: J.D.C. Linnell, 'Border controls: Refugee fences fragment wildlife', 529 (7585) *Nature* (2016) 156 [[doi: https://doi.org/10.1038/529156a](https://doi.org/10.1038/529156a)]; B. Pokorny *et al.*, 'Border fence: a new ecological obstacle for wildlife in Southeast Europe', 63 (1) *European Journal of Wildlife Research* (2017) 1-6 [[doi: https://doi.org/10.1007/s10344-016-1074-1](https://doi.org/10.1007/s10344-016-1074-1)]; C. Perrings and G. Halkos, 'Who Cares about Biodiversity? Optimal Conservation and Transboundary Biodiversity Externalities', 52 (4) *Environmental and Resource Economics* (2012) 585-608 [[doi: https://doi.org/10.1007/s10640-012-9544-8](https://doi.org/10.1007/s10640-012-9544-8)]; L.E. Ogden, 'Border Walls and Biodiversity: New barriers, new horizons', 67 (6) *BioScience* (2017) 498-505 [[doi: https://doi.org/10.1093/biosci/bix044](https://doi.org/10.1093/biosci/bix044)].

latest IPBES report,² which notes that around one million species face extinction and around 25% of fauna and flora are threatened. Unfortunately, security interests, or interests that have been “securitized”, are taking precedence over all other realities. Thus, the protection of biodiversity is not considered a priority compared to states’ hypothetical national security threats.

Notwithstanding these considerations, this paper will analyse the construction of two border walls in order to show that there are ecological, economic, political, peace-related and legal reasons to devote efforts to ensuring transboundary protection of biodiversity.³ First, it will examine how the construction of a border fence by Slovenia to stop the migratory flow has endangered numerous protected species. Despite the existing international legal framework, which includes EU and Council of Europe instruments that are binding on Slovenia, security-related reasons have once again taken precedence. Second, it will study and analyse the unique case of the establishment of the demilitarized zone (DMZ) between North and South Korea. The decision to create this zone, taken by the United Nations (UN) forces and North Korea in the 1953 armistice, entailed the establishment of a zone free of any type of human interference. This has resulted in the emergence of a unique and special place in the world that has enabled the development of biodiversity and the creation of a singular habitat. Because of its exceptional nature, it is necessary to study how international law could protect and conserve this habitat without undermining the peace process or a hypothetical reunification.

(B) THE SLOVENIAN BORDER FENCE

(i) Background: The Migratory Crisis and the Threat to Protected Species

In 2015, more than five years after the start of the financial crisis that wracked the EU Member States, one of the most decisive episodes in shaping the Union’s agenda took place: the migrant crisis. The massive flow of migrants to the EU’s borders in the midst of a crisis of confidence in both European and national institutions tested the strength of European institutions, as well as the Member States’ willingness to ensure transboundary cooperation in such a difficult situation. Despite the EU Council’s decision to set resettlement quotas,⁴ the different governments responded differently to the arrival of the flow of migrants at their national borders. This disparity of responses is captured perfectly by two extremes: whilst Germany chose to open its borders, other states, such as Hungary, decided to build a border wall to put an end to uncontrolled border crossings.

Indeed, it was Hungary’s construction of this border wall that triggered the problems that will be discussed here.⁵ Because the wall prevented migrants and refugees from accessing Hungary, the

² [IPBES/7/10/Add.1](#), Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

³ See, for example, D. van Niekerk and L. Hildebrandt, ‘Transboundary Protection of Biodiversity in the Context of Human and Environmental Security and Climate Change’, in L.J. Kotzé and T. Marauhn (eds), *Transboundary Governance of Biodiversity* (Brill, 2014) 342–367, at 352–354 [doi: <https://doi.org/10.1163/9789004273894>].

⁴ [Council Decision \(EU\) 12098/15, O.J.L 248 of 24 September 2015, at 80–94.](#)

⁵ The construction of the border wall in Hungary was completed in October 2015.

migratory flows were channelled towards states whose borders were still permeable. One such state was Slovenia, which, since the construction of the Hungarian wall, has witnessed an increase in the number of migrants reaching its border. Overwhelmed by the growing flow and unable to maintain control over the border, the Slovenian government chose to emulate the Hungarian government's decision and ordered the construction of a border fence along the border with Croatia.⁶

The border between Slovenia and Croatia spans a total of 349 kilometres across one of the continent's richest regions in terms of wildlife: the Dinaric Alps. This region is a unique habitat home to a large number of species, many of them protected, including the brown bear, the wolf, the red fox or the Eurasian lynx. Numerous studies have demonstrated the impact of the construction of border walls and fences on specific habitats and species. Broadly speaking, direct human interference in protected habitats causes problems related to habitat fragmentation, the loss of genetic wealth, and species extinction. All these problems are taking place, or will take place, in the Dinaric Alps in relation to the aforementioned species. This makes it necessary to analyse the applicable EU and international regulations to determine whether or not the border fence's construction is compliant with the laws that are binding on Slovenia.

In any case, the fence's construction raises an issue worth considering: the introduction of national security as a factor enabling circumvention of international obligations. Since the 1990s, the Copenhagen school has been analysing the "securitization" of international relations,⁷ i.e. the absorption into the sphere of security of areas that once fell beyond its scope. In this regard, states have evaded their obligations towards asylum seekers and in relation to environmental protection for urgent reasons of national security.

(2) Has the International Legal Framework on the Transboundary Protection of Biodiversity Been Respected?

The construction of border fences raises several legal questions related to the protection of biodiversity. This paper will focus on just two: the need to perform an environmental impact assessment for any project that might affect the environment, and due protection of endangered species or singular habitats.

(i) *The Obligation to Perform an Environmental Impact Assessment*

The obligation to perform an environmental impact assessment before building anything that might disturb the environment is established in numerous international instruments, although of varying scope and with different levels of detail. It was set forth in the 1992 Rio Declaration, has been specified by instruments such as the Espoo Convention and was established as an obligation of customary

⁶ Although it cannot be exclusively attributed to the construction of border walls, illegal border crossings fell dramatically beginning in 2015, just as these walls were built. Whilst in 2015, 764,033 attempted illegal border crossings were detected, by 2018, the number had fallen precipitously to 5,869 people. (Data from [FRONTEX](https://frontex.europa.eu/).)

⁷ B. Buzan, O. Waever and J. de Wilde, *Security: A New Framework for Analysis* (Lynne Rienner Publishers, 1998); J. Huysmans, 'Revisiting Copenhagen: Or, On the Creative Development of a Security Studies Agenda in Europe', 4 (479) *European Journal of International Relations* (1998) 479-505 [doi: <https://doi.org/10.1177/1354066198004004004>]; H. Stritzel, 'Towards a Theory of Securitization: Copenhagen and Beyond', 3 (13) *European Journal of International Relations* (2007) 357-383 [doi: <https://doi.org/10.1177/1354066107080128>]; M. McDonald, 'Securitization and the Construction of Security' 14 (53) *European Journal of International Relations* (2007) 563-587 [doi: <https://doi.org/10.1177/1354066108097533>].

international law by the International Court of Justice in 2010. Likewise, EU law, through various directives, also provides for this obligation with enough specificity to prevent evasion of the responsibility to carry these assessments out. It is thus important to determine not only whether the objective requirements established by the different regulatory instruments were met, but also whether the emergency situation alleged by Slovenia to exclude its obligation to perform such an assessment falls within the scope of the law.

Article 17 of the 1992 Rio de Janeiro Declaration⁸ establishes the obligation to undertake an environmental impact assessment. However, it characterizes such assessments as national instruments that must be implemented when an activity is likely to have a significant adverse impact. Citing this ambiguity of terms, the Declaration's non-binding nature and the fact that the decision is left to national authorities, the literature has underscored the legal uncertainty resulting from the difficulty of determining the existence of the objective element, namely, the existence of a risk.⁹ In any case, this obligation has been determined by the International Court of Justice, which, in considering the obligation to perform an environmental impact assessment a customary norm, has specified the duty of states to perform one prior to undertaking a project, as well as to monitor the project's impact throughout the activity's duration.¹⁰ It is thus an obligation that arises prior to the undertaking of the project, but which remains in force for the duration thereof.¹¹

The mandatory environmental impact assessment was not carried out prior to the construction of the border fence between Slovenia and Croatia. Considering the massive arrival of migrants following the closure of the Hungarian border an emergency situation, the Slovenian authorities cited national security concerns to bypass the procedural obligation to perform one. Although the alleged circumstances are not provided for in the Rio Declaration and are referred to only summarily by the International Court of Justice,¹² they are set out and provided for in other binding international instruments for Slovenia.

Given the lack of specificity of the obligation and the determination of the objective elements giving rise to it, both part of the literature and Judge Bhandari, in his separate opinion,¹³ consider that the Espoo Convention¹⁴ should be the instrument of reference for determining its content. As Slovenia is a party to

⁸ [A/CONF.151/26 \(Vol. I\), Rio Declaration on Environment and Development](#).

⁹ J.E. Viñuales, 'La protección ambiental en el Derecho consuetudinario internacional', 69 *Revista Española de Derecho Internacional* (2017) 71-91, at 85 [doi: <https://doi.org/10.17103/redi.69.2.2017.103>].

¹⁰ *Case concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay), judgment of 20 April 2010*, at § 205, and *Certain Activities Carried Out by Nicaragua in The Border Area (Costa Rica v. Nicaragua)*, at § 161.

¹¹ In fact, the International Court of Justice restricted the customary international law international obligation regarding Article 17 of the Rio Declaration, limiting it to a cross-border context, as in the case of the construction of the border wall between Slovenia and Croatia. See: P.-M. Dupuy, G. Le Moli and J.E. Viñuales, 'Customary International Law and the Environment', 2 *C-EENRG Working Papers* (2018) 1-23, at 19; and S. Marsden, 'Determining Significance for EIA in International Environmental Law', *Questions of International Law, Zoom-in 42* (2017), at 1-2.

¹² Inversion of the burden of proof.

¹³ *Separate Opinion of Judge Bhandari*, in *Certain Activities Carried Out by Nicaragua in The Border Area (Costa Rica v. Nicaragua)*, at 10 § 33.

¹⁴ *Convention on Environmental Impact Assessment in a Transboundary Context* (adopted 25 February 1991, entered into force 1997); Slovenia has been a party since 22 May 1992, as is the European Union, which signed it on 25 February 1991 and ratified it on 24 June 1997.

that convention, it is obliged to fulfil its requirements, namely: to conduct the assessment *ex ante* should any of the criteria set out in Appendix III for determining the existence of a risk be met, i.e., the size of the project, its location or any complex or adverse effects it might have for human beings, the existing or potential use of the area, additional loading on the environment, or, as in the case at hand, for valued species or organisms. Subsequently, it must establish a period for notification and queries, as well as monitor compliance with the conditions set out in the project and review its impact to ensure proper management.¹⁵ The obligation to perform an environmental impact assessment is also set out in EU legislation, specifically, in the Directive on the assessment of the effects of certain public and private projects on the environment.¹⁶ Nevertheless, like the rest of the European states that closed their borders, Slovenia obviated the environmental impact assessment, neither carrying out, nor even trying to justify its failure to do so in accordance with the aforementioned rules.

Given that the present paper focuses on the protection of biodiversity, it is essential to look at how the construction of the border fence affected the protected species that live in the Dinaric Alps. To this end, once the breach of this specific obligation has been explicitly defined, identifying the applicable biodiversity protection regime will be essential to analyse Slovenia's violations.

(ii) *The Biodiversity Protection Regime: A Breach with Serious Consequences*

As noted, the Dinaric Alps are a unique habitat home to numerous protected species. The construction of the border fence may affect them, and the consequences could be irreparable. Is the fence's construction protected by applicable international regulations? As already noted, the obligation to perform an environmental impact assessment was breached. However, to answer this question, it is necessary to refer to the Bern Convention, the Bonn Convention and the EU's Habitats Directive, the legal framework regulating the protection of the affected species, mainly, the brown bear, the wolf, the red deer and the Eurasian lynx.

The Council of Europe's Bern Convention¹⁷ laid the foundations for the European biodiversity protection system, paying special attention to species and habitats whose conservation requires transboundary cooperation. The Convention can be considered a direct predecessor of the regulations that would later be established by the EU in two ways: first, it created the Emerald Network,¹⁸ the predecessor of the Natura 2000 network established in the Habitats Directive; second, it established strictly protected species of fauna,¹⁹ including the wolf, bear and Eurasian lynx, all of which are found in the Dinaric Alps. The Convention requires states to take all appropriate measures to ensure the conservation of these species, prohibiting their capture, the deterioration of their breeding sites or resting places, and

¹⁵ All contained in Appendix V.

¹⁶ [European Parliament and Council Directive 2011/92/EU, OJ L 26, 28 January 2012, 1-21.](#)

¹⁷ [Convention on the Conservation of European Wildlife and Natural Habitats.](#)

¹⁸ [Emerald Network of Areas of Special Conservation Interest.](#)

¹⁹ [Annex II.](#)

any disturbance that might adversely affect them.²⁰

The regulations established under the Habitats Directive²¹ are similar to those set forth in the Bern Convention. To this end, it sets up the Natura 2000 network, made up of “special areas of conservation” due to their great value in terms of biodiversity. One of these special protection areas is the Dinaric Alps. Several important factors are worth considering for the case at hand. The first is the state mandate regarding the obligation to take all appropriate steps to prevent the habitats’ deterioration.²² It also requires the performance of an environmental impact assessment before any plan or study that might affect the protected areas, an obligation that, as noted earlier, Slovenia ignored.²³ Finally, attention should be called to a mechanism included in the Directive that Slovenia could have used to except the project from the protection regime. Article 6.4 provides for the following possibility: if the outcome of the environmental impact assessment shows that the project could have negative implications for sites that host a priority natural habitat type and/or priority species – such as the species in question here – states may allege public-safety considerations. However, this option requires prior consultation with the Commission, and a report on the exceptions applied must be submitted to the Commission every two years.²⁴ In other words, mechanisms to exclude the strict protection regime did exist, but Slovenia chose not to use them. This was most likely due to the demanding procedural conditions, which remain in force until the cause giving rise to the exceptional regime comes to an end.

Although they lack binding force, it is worth noting that two resolutions of the Conference of Parties to the Bonn Convention,²⁵ of which Slovenia is a party, have stressed how important it is for the states party to carry out an environmental impact assessment,²⁶ as well as the potential impacts of building border fences for the conservation status of mammals. In the latter case, it indicated that the risks to species range from mortality to habitat fragmentation.²⁷

The negative consequences of the construction of border walls, in this case a metal fence, for biodiversity can be irreversible. One might expect states to cooperate closely to ensure the protection of the protected species whose habitats are not confined by national borders. According to Fleurke and Trouwborst,

“It would thus appear that neighboring Member States are to cooperate in the designation and protection of cross-border habitat sites, and likewise are to coordinate their efforts concerning transboundary populations of strictly protected species (...) Large carnivores such as Eurasian lynx (*Lynx lynx*), wolves and brown bears (*Ursus arctos*) are prime examples of the latter, and the adoption of transboundary population-level management plans has been

²⁰ Art. 6 of the Convention.

²¹ [Council Directive 92/43/EEC, OJ L 206 of 22 July 1992, 7-50.](#)

²² Art. 6.2.

²³ Art. 6.3.

²⁴ Art. 16.2.

²⁵ [Convention on the Conservation of Migratory Species of Wild Animals.](#)

²⁶ [UNEP/CMS/Resolution 07.02 on Impact Assessment and Migratory Species](#) (24 September 2002), at § 2: “The COP has requested contracting parties to conduct an EIA or SEA for potentially harmful projects and plans, including assessment of any ‘effects involving impediments to migration’ and any transboundary effects on migratory species”.

²⁷ [UNEP/CMS/Resolution 11.24 on the Central Asian Mammals Initiative](#) (9 November 2014), at preamble § 2: “fences can have a particularly detrimental impact on the conservation status of migratory mammals and may cause direct mortality and fragmentation of habitats, disrupting essential movement from one place to another”.

recommended for these species.”²⁸

However, cooperation has been non-existent. In a magnificent study,²⁹ Linnell et al. sounded the alarm regarding the specific potential threats to each protected species. Bears would be the species to suffer the fewest consequences, insofar as the population would not be threatened unless the two states failed to adapt their domestic laws on hunting. Wolves, in contrast, would suffer horrible consequences, as packs would be isolated, which, because of the resulting incest and loss of genetic wealth, would render the species' survival unfeasible in the long term, due to population fragmentation. And the Eurasian lynx would be doomed to disappear because of the fence's construction.

It can be concluded that security considerations take precedence over all other issues, including environmental ones and, more specifically, those related to biodiversity protection. According to Trouwborst, impacts on wildlife are not considered in the decision-taking process, and environmental legislation is not applied or is simply ignored when the security element is introduced.³⁰

(3) The Failure to Respond to Breaches: A Mistake with Serious Consequences

Given the breach of the international obligations discussed above, one would have expected at least the European institutions to respond, establishing sanctioning mechanisms for the breach of EU law, specifically, the Habitats Directive. However, the response was limited to a letter sent by the Croatian foreign minister in 2015, with no specific repercussions.³¹ Clearly, the European Commission should have initiated the established procedure for breaches of EU law, which, ultimately and in the case of a hypothetical breach of the requirement, would have allowed the Court of Justice to rule on the matter.

Another remarkable aspect, which serves to confirm the securitization theory, is that, although the Slovenian government cited an alleged security emergency to build the border fence, it remains standing four years later. In other words, the justification for the border fence's construction was the massive arrival of migrants to Slovenian borders. However, since the agreement was signed with Turkey,³² migration flows have decreased dramatically, calling into question the need, if ever there was one, for the fence to remain standing. The damage to biodiversity started the moment work began on its construction.

²⁸ F. Fleurke and A. Trouwborst, 'European Regional Approaches to the Transboundary Conservation of Biodiversity: The Bern Convention and the EU Birds and Habitats Directive', in L.J. Kotzé and T. Marauhn (eds), *Transboundary Governance of Biodiversity*, (Brill, 2014) 129-162, at 145 [doi: <https://doi.org/10.1163/9789004273894>].

²⁹ J.D.C. Linnell *et al.*, 'Border Security Fencing and Wildlife: The End of the Transboundary Paradigm in Eurasia?', 14 (6) *PLOS Biology* (2016) 1-13, at 4 [doi: <https://doi.org/10.1371/journal.pbio.1002483>].

³⁰ A. Trouwborst *et al.*, 'Border Fences and Their Impacts on Large Carnivores, Large Herbivores and Biodiversity: An International Wildlife Law Perspective', 25 (3) *Review of European Community & International Environmental Law* (2016) 291-306, at 292 [doi: <https://doi.org/10.1111/reel.12169>].

³¹ This diplomatic note was not intended as an official protest against the construction of the border fence and its potential repercussions for biodiversity. It was sent to protest the border fence built on the River Čabranka, which Croatia considers part of Croatian territory. See: V. Pavlic, 'Croatian Foreign Minister on Migrant Crisis and Relations with Slovenia', *Total Croatia News* (2016).

³² [EU-Turkey Statement, 18 march 2016](#). For more information on the agreement between the EU and Turkey and the nature thereof, see: F. Peña Díaz, 'La Agenda Europea de Migración: últimos desarrollos', 33 *Revista Electrónica de Estudios Internacionales* (2017), at 8-14 [doi: <https://doi.org/10.17103/reel.33.10>].

Mechanisms should have been put into place to minimize the adverse effects for the protected species. As it stands, much of the damage done may be irreparable.

In any case, although this paper has focused on Slovenia, Croatia shares some of the responsibility. Transboundary cooperation for the protection of biodiversity requires interstate collaboration. Rather than inaction, the Croatian government should have responded strongly and vigorously to protect a common heritage: the protected habitat, included in the Natura 2000 network, of the Dinaric Alps.

(B) THE KOREAN DEMILITARIZED ZONE

Notwithstanding the foregoing, some studies have shown that the construction of border walls can, potentially, have a positive impact on biodiversity protection.³³ Mainly, these effects occur when they manage to isolate a given habitat from human interference. Some authors have proposed the radical utopian possibility of leaving half the planet untouched by humans, to allow ecosystems to restore themselves.³⁴ Although for different reasons, and in a post-conflict scenario, this is what has happened in the Korean DMZ. The zone is a singularity and a good example of the beneficial effects that a lack of human interference in nature can have for the conservation and protection of biodiversity.

(i) The Creation of the Demilitarized Zone in the 1953 Armistice: A Unique Ecosystem

After the armed conflict from 1950 to 1953, the armistice that ended the hostilities between the North Korean forces and the UN troops established a demilitarized zone between North and South Korea.³⁵ The zone stretches two kilometres to the north and south of the military demarcation line and is thus 248 km long and 4 km wide, comprising a total of 907 square kilometres. No type of economic activity is permitted in the DMZ, and military authorization from both parties is required to engage in any kind of activity near it. Together, the DMZ and the area in which authorization is required to engage in any type of activity are known as the “civilian control zone”.³⁶ There is thus a buffer zone that goes beyond the boundaries of the DMZ itself, which constitutes a barrier to human activity.

Despite its name, the “demilitarized zone” is one of the most militarized places in the world, with mined areas and constant surveillance by the military forces on both sides of the border. This highly idiosyncratic state of affairs makes the zone unique in the world, as it constitutes a dual reality: on the one hand, the zone has enabled and continues to enable the development and spread of biodiversity; on the other, it exists under constant threat of destruction.³⁷ The risks looming over the ecosystem include both

³³ Linnell, ‘Border security...’, *supra* n. 29, at 7. Specifically, the study highlights the benefits of the construction of a border fence between Mongolia and China for the khulan (*Equus hemionus*).

³⁴ E. O. Wilson, *Half-Earth: Our Planet’s Fight for Life* (Liveright, New York, 2016).

³⁵ [Armistice Agreement](#).

³⁶ E.-G. Hwang, ‘The DMZ and the Destiny of a Divided Korea’, in R. Guo and C. Freeman (eds), *Managing Fragile Regions: Method and Application* (Springer-Verlag, New York, 2011) 47-59, at 50 [doi: https://doi.org/10.1007/978-1-4419-6436-6_3].

³⁷ *Ibid.*

those due to military activity³⁸ and those stemming from a potential reunification (land reclamation, natural resource exploitation, economic uses and infrastructure construction).

This article will attempt to respond to the following question: can international law be the tool needed to ensure the conservation and protection of the DMZ's ecosystem? To do so, some information on the species that live there, especially the protected ones and those that are most endangered, would be helpful. As noted in the widely acclaimed study by Kim,³⁹ the DMZ is the habitat of two of the world's most endangered bird species – the white-naped crane (*Grus vipio*) and the red-crowned crane (*Grus japonensis*) – as well as rare mammal species, such as the black bear (*Selenarctos thibetanus ussuricus*) and the musk deer (*Moschus moschiferus caudatus*).⁴⁰ The difficulty of accessing the zone, couple with the reluctance to perform the necessary assessment to enable accurate identification of the fauna and flora that make up the ecosystem, are a stumbling block that must be overcome to ensure effective protection and conservation.

(2) Ensuring the Ecosystem's Protection through International Law

(i) *Making the Demilitarized Zone a Peace Park*

In the wake of armed conflicts, numerous aspects and factors shape the post-conflict scenario. However, land management and environmental protection are rarely considered beyond the need to clear the conflict areas of war *matériel* such as antipersonnel mines. Armed conflicts have dire consequences for the territory in which they are fought, consequences that continue to be felt many years after the conflict ends.⁴¹ However, the transformation of military zones into environmental sanctuaries is rarely proposed. One method for achieving such a transformation is “warfare ecology”,⁴² a tool that would allow for policies to be implemented to enable the transition from military zones to areas of special environmental conservation, for example, through the creation of “peace parks”.

Peace parks are defined as:

“transboundary protected areas that are formally dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and to the promotion of peace and cooperation”⁴³

³⁸ As noted in K.-G. Kim, ‘Status and Ecological Resource Value of the DMZ Area’ in K.-G. Kim, *The Demilitarized Zone (DMZ) of Korea* (Springer-Verlag, Berlin Heidelberg, 2013) 55-71, at 61 [doi: https://doi.org/10.1007/978-3-642-38463-9_3]. military activity, such as burning parts of the forests to improve visibility, can be harmful for the ecosystems.

³⁹ K.C. Kim, ‘Preserving Biodiversity in Korea’s Demilitarized Zone’, 278 *Science* (1997) 242-243, at 242 [doi: <http://dx.doi.org/10.1126/science.278.5336.242>].

⁴⁰ The expansion of wildlife in the zone has also been reported in the press. See: S. Wilson, ‘[Korea’s Demilitarised Zone Is Becoming a Haven for Wildlife](#)’ or L. Brady, ‘[How wildlife is thriving in the Korean peninsula’s demilitarised zone](#)’.

⁴¹ See, for example: J. Hupy, ‘The Environmental Footprint of War’, 14(3) *Environment and History* (2008) 405-421 [doi: <https://doi.org/10.3197/096734008X333581>].

⁴² G.E. Machlis and T. Hanson, ‘Warfare Ecology’ in G. Machlis *et al.* (eds), *Warfare Ecology: NATO Science for Peace and Security* (Springer Netherlands, 2011) 33-40, at 38 [doi: https://doi.org/10.1007/978-94-007-1214-0_5].

⁴³ A. Hammill and C. Besançon, ‘Measuring Peace Park Performance: Definitions and Experiences’ in S.H. Ali (ed), *Peace Parks: Conservation and Conflict Resolution* (MIT Press, Cambridge, Massachusetts, 2007) 23-40, at 24.

From the author's point of view, and despite the misgivings of some authors,⁴⁴ the use of the DMZ as a tool to catalyse regional cooperation could have numerous benefits for resolving the conflict and protecting the ecosystem. The creation of a peace park would have positive consequences for the DMZ and the Korean peninsula as a whole, as it would promote environmental protection and could prompt the development of the respective domestic laws. However, it would need to be determined and created prior to any peace talks or in parallel to the peace process to prevent the non-military threats hanging over the DMZ from transpiring.

In their 2018 letter to the UN Secretary-General,⁴⁵ the representatives of both countries undertook to "transform the DMZ into a peace zone in a genuine sense". Although the message they sought to convey was powerful, it was not free of ambiguity. The South Korean government has already sought to turn the DMZ into a peace park to facilitate peace-building through the conservation of biodiversity in the past. It is thus difficult to understand why the recent efforts to bolster the peace talks have seemingly failed to pursue the same goals. It may suggest that both states wish to obtain an economic and social return from the use and exploitation of the DMZ's resources. That would undeniably be a grave mistake that would only further degrade Korean wildlife. As noted earlier, transboundary cooperation has positive effects from an ecological, political (insofar as it promotes political interaction between states with positive consequences), economic (through alternative activities, such as eco-tourism or poverty reduction in local communities through payments for ecosystemic services) and peace-related effects.⁴⁶

(ii) *The Existing Tools in International Law to Ensure Protection of the Ecosystem*

International law thus faces a twofold challenge: it must ensure the protection of the biodiversity without creating obstacles for reconciliation and cooperation between North and South Korea. In the author's view, turning the DMZ into a peace park could thus be a good tool to achieve this dual objective. There are two mechanisms that could be proposed in the current climate of goodwill: a joint nomination of the DMZ for designation as a biosphere reserve or its inclusion on the World Natural Heritage list. For either nomination to succeed, several requirements must be met.

The first option available to both states is to jointly nominate the DMZ for biosphere reserve status. Biosphere reserves are defined as:

"[A]reas of terrestrial and coastal /marine ecosystems or a combination thereof, which are internationally recognized within the framework of UNESCO's Programme on Man and Biosphere."⁴⁷

Biosphere reserves have a threefold function: a conservation function, through the preservation of resources, species, ecosystems and landscapes; a development function, insofar as they enable the region's human and economic development; and a logistical support function, as they provide support for research,

⁴⁴ K.C. Kim, 'Preserving Korea's DMZ for Conservation: A Green Approach to Conflict Resolution', in S.H. Ali (ed), *Peace Parks: Conservation and Conflict Resolution* (MIT Press, Cambridge, Massachusetts, 2007) 239-260, at 251.

⁴⁵ [A/72/109-S/2018/820](#), Letter dated 6 September 2018 from the representatives of the Democratic People's Republic of Korea and the Republic of Korea to the United Nations addressed to the Secretary-General.

⁴⁶ D. van Niekerk and L. Hildebrandt, *supra* n. 3, at 352-354.

⁴⁷ [Biosphere Reserves: The Seville Strategy and the statutory framework of the world network](#), at 4.

environmental-education and conservation-monitoring projects. All these functions would be very positive for the DMZ, beyond the aforementioned conservation and protection of biodiversity. For example, both states have already been encouraged to inventory and conduct a study of the DMZ's existing biodiversity.⁴⁸ The economic and tourism development of the region bordering the DMZ could also provide an incentive for North Korean involvement in the proposal.

South Korea submitted an individual nomination of the DMZ for biosphere reserve status⁴⁹ in 2012. However, the nomination was denied, amongst other things, because it failed to meet certain technical requirements – a buffer zone had not been defined – and the proposal did not have the consent of the UN Command. Nevertheless, much of the territory located in the southern area of the DMZ has achieved biosphere reserve status,⁵⁰ which opens a hopeful path for a hypothetical joint nomination.

Likewise, it would be interesting to seek the DMZ's inclusion on the World Natural Heritage List, under the World Heritage Convention.⁵¹ As the DMZ meets the requirements established in Article 2 of the Convention,⁵² the necessary political will could lead to its inclusion⁵³ on the list of world natural heritage. In this case, although sovereignty over the zone would need to be defined, designating the DMZ as world natural heritage would turn it into a “global commons”, making its conservation for future generations essential.⁵⁴

In short, regardless of the tool used to do so, in the author's view, turning the DMZ into a peace park is the best way to ensure the protection of the unique ecosystem constituted by the region. It is also necessary for the protection and conservation of the habitat to be ensured as soon as possible, to prevent degradation as a result of military activities and the negative impacts of any hypothetical reunification or dismantling of the DMZ. To involve North Korea, which is less developed and has greater needs than South Korea, it will be imperative to ensure the necessary transfer of resources to prevent the existing natural resources and desire to appropriate them from destroying this unique and exceptional ecosystem.

(C) CONCLUSIONS

As explained and analysed, the proliferation of border walls or fences for security reasons has a negative

⁴⁸ [Convention on Biological Diversity – Fifth National Report Korea \(2016\)](#).

⁴⁹ [Korea DMZ Biosphere Reserve Nomination](#).

⁵⁰ [The 31st Session of the International Coordinating Council \(ICC\) of the MAB](#).

⁵¹ [Convention Concerning the Protection of the World Cultural and Natural Heritage](#).

⁵² “For the purposes of this Convention, the following shall be considered as ‘natural heritage’: natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view; geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation; natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.”

⁵³ Political will demonstrated by the government of the region of Gyeonggi (South Korea), which aims to submit its bid to be designated a World Natural Heritage Site in 2022.

⁵⁴ A. Gillespie, *Protected Areas and International Environmental Law* (Martin Nijhoff Publishers, Leiden/Boston, 2007), at 101.

impact and implications for the protection and conservation of biodiversity in transboundary contexts. Therefore, despite the lack of any international law rule preventing states from creating physical barriers on their borders, their construction should be avoided or restricted. In any case, national security cannot be an obstacle to compliance with binding international law for states intended to mitigate the negative repercussions for biodiversity, essentially habitat fragmentation and the restriction of migration.

As seen here, the construction of the Slovenian border fence, outside of international law, had no consequences. Neither the obligation to perform a prior environmental impact assessment, with all the ensuing procedural requirements, nor the obligations arising under the Habitats Directive have been respected. Yet no sanctioning procedure has been initiated for breach of EU law, which undermines environmental protection and the international law system itself. Additionally, the data on migrant flows show that the alleged emergency has abated. This suggests that the fence should not remain standing, as there are other more effective ways of controlling entry into Slovenian territory that do not entail such great harm for biodiversity.

Finally, and as one of the exceptions to the aforementioned considerations, the establishment of the Korean DMZ, delimited by two border fences, has led to the creation of a unique ecosystem in the world. Indeed, one could argue that the development and spread of wildlife has been the sole positive consequence of the armed conflict that ended with the signing of the armistice in 1953. The main challenge now is its protection. The wealth of resources that it contains must not compromise its conservation. In this regard, its transformation into a peace park could provide the necessary impetus and serve as a catalyst for transboundary cooperation between the two states. Thus, two great aspirations would be realized: ending the temporary – albeit long-lasting – situation established in the armistice by reaching a peace agreement, whilst ensuring the ecosystem's conservation and protection.