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Prosecuting environmental harm before the International Criminal Court

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III. ENVIRONMENTAL HARM AND JURISDICTIONAL AND PROCEDURAL CHALLENGES

A. Introduction

Procedure is critical to the implementation and effectiveness of a set of criminal prohibitions.⁷¹¹ Former ICTY Judge and President of the Assembly of States Parties, O.G. Kwon observed that without the “rails of international criminal procedure” the “the train of international criminal law” would go nowhere.⁷¹² History suggests that criminal procedure is not only essential to provide a framework in which the parties can argue the case, but also serves to harness the strong emotions that frequently surround serious crimes. In this manner, procedure helps to discourage the resort to mob justice and vigilantism.⁷¹³ The need for functional and effective criminal procedure is particularly acute at the international level, where the substantive provisions are applied to conduct occurring in various jurisdictions with differing procedural frameworks.⁷¹⁴ Contradictions, ambiguities, and lacunae in the procedural framework can hinder and potentially undermine the possibility of fair and expeditious proceedings. Given the possibility of ICC investigations and prosecutions placing increased emphasis on environmental harm in line with the Office of the Prosecutor’s case selection guidelines,⁷¹⁵ it is imperative to examine the procedures that would apply to such proceedings.

The applicability of the ICC’s procedural framework to cases involving environmental harm is largely unexplored in jurisprudence and literature. There have been no prior cases of prosecutions of environmental harm under international criminal law in its modern form,⁷¹⁶

⁷¹¹ See Sergey Vasiliev et. al., *International Criminal Procedure*, (Oxford University Press 2013), Introduction, p.2 (“The quality of the procedural law and the efficiency of the institutional structure in which that law is to be interpreted, litigated, and applied have ranked among the most pressing issues in international criminal justice.”).

⁷¹² O.G. Kwon, “The Procedural Challenges Faced by International Criminal Tribunals and the Value of Codification”, para.2, cited in See Sergey Vasiliev et. al., *International Criminal Procedure*, Introduction, p.5.

⁷¹³ See generally, Oliver Wendall Holmes, *The Common Law*, (Cosimo Books, New York, 2009 (Holmes first printed this collection of 1881)).

⁷¹⁴ See Cryer et. al. (2010), pp.425-426 (noting the various differences between diverse common law and civil law approaches).

⁷¹⁵ OTP 2016 Case Selection Paper, para.41.

⁷¹⁶ Some limited guidance can be gleaned from the *Rendulić* case from the post-World War Two United States Military Tribunal. In that case, scorched earth tactics were adjudicated. However, the charge was wanton destruction of property which is an anthropocentric crime, as indicated by the summary of the charge in the Trial Judgement: “defendants ordered troops under their command to burn, level and destroy entire villages and towns and thereby making thousands of peaceful non-combatants homeless and destitute, thereby causing untold suffering, misery and death to large numbers of innocent civilians without any recognised military necessity for so doing”. The procedure applied at the United States Military Tribunal at Nuremberg was considerably more flexible than the applicable United States domestic law at the time, with hearsay rules and other typical

and, to date, there is no detailed academic treatment of the procedural framework that would apply in such eco-centrally oriented proceedings.

The first part of this chapter sets out the jurisdictional framework and the rules governing the initiation of proceedings at the ICC, as well as the admissibility regime regarding specific cases and investigations. The chapter then turns to the ICC's evidence gathering and presentation framework, including the rules governing the admission of evidence, expert evidence, and judicial involvement in evidence-gathering.

Based on the application of rules and principles to potential cases of environmental harm, this chapter asks whether the procedural framework of the ICC is exclusively conceived of anthropocentrically,⁷¹⁷ rather than eco-centrally.⁷¹⁸ It assesses the impact of this orientation, in terms of precluding or prejudicing proceedings for environmental harm. To substantiate the discussion, the chapter seeks to identify whether adjudicative incoherence results when the procedural framework is applied to environmental harm.⁷¹⁹ Throughout the analysis of the procedural framework, the provisions and rules are applied to three paradigmatic forms of environmental harm – military attacks causing excessive harm to the environment, toxic dumping, and wildlife exploitation, in order to demonstrate the feasibility and limitations of using ICC proceedings to address environmental harm.⁷²⁰

As with the preceding chapters, the focus of the following analysis is the ICC. Accordingly, the sources of law relied on are the Rome Statute and accompanying instruments, the relevant conventional and customary international law, and the general principles of law, as set out in

restrictions eschewed in favour of a broad rule favouring admissibility of probative evidence while providing the opposing party an opportunity to challenge its authenticity and probity; see Trial of Wilhelm List and others (“The tribunals shall not be bound by technical rules of procedure, and shall admit any evidence which they deem to have probative value. Without limiting the foregoing general rules, the following shall be deemed admissible if they appear to the tribunal to contain information of probative value relating to the charges, affidavits, depositions, interrogations, and other statements, diaries, letters, the records, findings, statements and judgments of the military tribunals and the reviewing and confirming authorities of any of the United Nations, and copies of any document or other secondary evidence of the contents of any document, if the original is not readily available or cannot be produced without delay. The tribunal shall afford the opposing party such opportunity to question the authenticity or probative value of such evidence as in the opinion of the tribunal the ends of justice require.”) (However, note that the Tribunal additionally applied more restrictive standards governing the admission and weighing of evidence).

⁷¹⁷ See *Infra*, Chapter I(D) on Definitional Underpinnings, anthropocentric, or human-centred, values, are those designed to minimize unnecessary human suffering resulting from armed conflict. See also Schmitt (1997), pp.6, 56, 62.

⁷¹⁸ See *Infra*, Chapter I(D) on Definitional Underpinnings, eco-centric values are those that see the environment as having an intrinsic value, irrespective of whether human beings suffer as a result of its destruction. See also *e.g.*, Jensen (2005).

⁷¹⁹ For the details of the adjudicative coherence test, see *infra*, Chapter I(C)(3) on Adjudicative Coherence.

⁷²⁰ See *infra*, Chapter I(C)(4) on paradigmatic types of environmental harm.

article 21 of the Rome Statute.⁷²¹ Where appropriate, practice and procedure from domestic jurisdictions is highlighted to illustrate potential complications arising from the application of the ICC's regulatory framework to environmental harm and alternative approaches to redress these concerns.⁷²²

B. The ICC's jurisdiction and admissibility framework and environmental harm

Before assessing the adjudicative coherence and anthropocentric or eco-centric conceit of the procedures governing the prosecution of environmental harm at the ICC, it is necessary to outline the relevant procedures by which cases are brought before the Court. As will be shown, the Court's jurisdictional limits and trigger mechanisms are not explicitly framed in an anthropocentric manner (aside from the substantive provisions, which are almost all framed in an anthropocentric manner⁷²³), but nonetheless amplify the anthropocentric orientation that is evident on the face of the substantive crimes set out in the Rome Statute.

1. Jurisdiction

There are strict jurisdictional limits that circumscribe the work of the World's first International Criminal Court. As the substantive jurisdictional parameters governing the crimes the Court can address (*rationae materiae*) have been explored in the previous chapter, the following analysis focuses on the temporal, geographic, and personal jurisdictional parameters. The remaining jurisdictional boundaries to the Court's work are set out forthwith.

Looking to temporal jurisdiction (*ratione temporis*), the Court has an absolute temporal start date of 1 July 2002, which was the date on which the Rome Statute entered into force and the Court began to operate.⁷²⁴ In respect of States that join the Court after July 2002, the Court can only exercise its jurisdiction after the entry into force of the Rome Statute for that State, unless the State makes a declaration of *ad hoc* acceptance of the Court's jurisdiction under article 12(3) or the UNSC refers a situation to the Court.⁷²⁵

The Court's temporal jurisdictional parameters limit the possibility of prosecuting environmental harm in the same manner as they limit the prosecution of other crimes in the

⁷²¹ See *infra* Chapter I(C)(1) (discussion of sources of law).

⁷²² See *infra* Chapter I(C)(1) (discussion of sources of law).

⁷²³ See above, Chapter II.

⁷²⁴ Rome Statute, article 11(1); article 24(1).

⁷²⁵ Rome Statute, article 11(2).

Rome Statute.⁷²⁶ Acts causing environmental harm that began before 2002 but continued to be perpetrated after 2002 could potentially be addressed by the Court, subject to the other jurisdictional requirements being met. The Statute states that the Accused can only be held responsible for conduct that occurs after its entry into force on 1 July 2002.⁷²⁷

The prospects of drawing pre-2002 conduct into the Court's fold are slim. If environmental harm occurred entirely prior to the entry into force of the Statute and only the effects of the conduct continued to be felt, the Court would be unlikely to be able to assert jurisdiction in light of the express terms of article 24(1): "no person shall be criminally responsible under this Statute for conduct prior to the entry into force of the Statute." Consequently, the often-cited example of an attack on the environment constituted by Saddam Hussein's burning of the Kuwait oil wells in 1991, for example, could not be adjudicated before the ICC, irrespective of whether some effects on the environment continue to be felt.⁷²⁸

Practice indicates a strict approach to the temporal jurisdiction of the Court will be maintained. In the context of complaints about Chevron's involvement in pollution of areas of Ecuador from the 1960s through to the 1990s during oil exploration and extraction activities, the plaintiff group seeking to initiate ICC proceedings attempted to circumvent this temporal limit by arguing that Chevron's post-2002 efforts to avoid responsibility drew its conduct within the Court's jurisdiction and that it amounted to crimes against humanity.⁷²⁹ This argument was dismissed, indicating a strict approach whereby the substantive conduct alleged to constitute crimes against humanity must occur within the Court's temporal jurisdiction.⁷³⁰

Attempts may be made to cast environmental harm as a continuing crime to draw the conduct into the Court's temporal jurisdiction. However, precedent from the ICTY suggests a strict approach will be taken to attempts to class crimes as continuing offences. The ICTR Appeals Chamber in the *Nahimana* case held that the Trial Chamber erred in considering that direct and public incitement to genocide was a crime that continued up until the genocide was

⁷²⁶ If the conduct were charged as aggression, then different temporal jurisdictional parameters would apply in line with the Aggression Amendments.

⁷²⁷ Rome Statute, article 24(1).

⁷²⁸ See *infra*, Chapter I(C)(4)(i) on military attacks anticipated to cause excessive environmental harm.

⁷²⁹ Lambert (2017), p.713.

⁷³⁰ See Lambert (2017), p.713.

committed, and held that the accused could not be convicted for the incitement that occurred in 1993 as that preceded the start of the ICTR's jurisdiction in 1994.⁷³¹

With regards to geographic jurisdiction (*ratione loci*), the Court can exercise jurisdiction with respect to acts occurring anywhere if the case is referred by the Security Council of the United Nations.⁷³² Otherwise, in the case of a State party referral or a *proprio motu* initiation of an investigation, the Court's jurisdiction is limited to acts on the territory of a State Party or on a vessel or aircraft registered to a State Party or by a national of a State party.⁷³³

In terms of geographic jurisdiction, the nature of environmental harm means that its impact is likely to be felt across multiple territories even if the causative act occurs in a separate territory. This raises the question of the applicability of the effects doctrine, whereby jurisdiction is asserted based on the effects of the acts in question being felt inside the territorial jurisdictional limits of a court even if the causative acts occur outside these limits.⁷³⁴ Views diverge on the applicability of this doctrine at the ICC.⁷³⁵ The terms of article 12(2)(a) suggest that at least part of the conduct in question would have to occur on the territory of a state party (or on board a vessel or aircraft registered to a State Party),⁷³⁶ but this issue remains jurisprudentially unsettled.

The Court's personal jurisdiction (*ratione personae*) is limited to natural persons, indicating that it cannot prosecute States or organizations.⁷³⁷ The Court's jurisdictional limit to natural human beings precludes the possibility of punishing corporate entities for serious environmental harm.⁷³⁸ Companies are widely recognised as playing a key role in serious environmental harm and some domestic approaches to addressing corporate crimes against the environment are well-developed.⁷³⁹ In this respect, proceedings at the ICC suffer from a significant restriction. While individual company directors and other representatives may be

⁷³¹ *Nahimana* AJ, paras, 723-724.

⁷³² Rome Statute, articles 12 and 13.

⁷³³ Rome Statute, article 12.

⁷³⁴ See generally, Michail Vagias, *The Territorial Jurisdiction of the International Criminal Court: Certain Contested Issues*, "Chapter 6: The Effects Doctrine", referring to the United States Anti-trust case of *U.S. v. Nippon Paper Industries Co. Ltd.*, 109 F.3d 1, 8 (1997) as an example of the effects doctrine being applied.

⁷³⁵ Schabas (2011), p. 82.

⁷³⁶ Rome Statute "Article 12(2) ... the Court may exercise its jurisdiction if one or more of the following States are Parties to this Statute or have accepted the jurisdiction of the Court in accordance with paragraph 3: (a) The State on the territory of which the conduct in question occurred or, if the crime was committed on board a vessel or aircraft, the State of registration of that vessel or aircraft;..."

⁷³⁷ Rome Statute, article 25(1).

⁷³⁸ Cusato (2017), text accompanying footnote 63.

⁷³⁹ McLaughlin (2000), p. 399.

prosecuted in their personal capacity, those natural persons' may have only been responsible for a limited aspect of the environmental harm caused by a corporation, leaving a potential impunity gap.

At the same time, immunities, such as head of State immunity or official capacity cannot operate to exempt persons from criminal responsibility for the acts falling under the Rome Statute.⁷⁴⁰

Understanding these jurisdictional limitations is critically important when assessing the utility of ICC proceedings to address harmful conduct. This is particularly the case when the conduct is not squarely addressed in the Rome Statute, as in the case of environmental harm for example (other than in the war crime of article 8(2)(b)(iv)). The Court's jurisdictional limitations define the ambit of its work and cannot easily be altered. Amending the Rome Statute requires action by the Assembly of State Parties, which is a potentially cumbersome and politically charged process.⁷⁴¹ Attempts to address environmental harm, or any other harm, before the Court, must pay due heed to these jurisdictional requirements or risk being aborted *ab initio*. The long-term nature and broad potential geographic extent of many forms of environmental harm provide considerable potential to fall within the Court's jurisdiction in these respects, even subject to strict interpretations of the Court's temporal, geographic, and personal jurisdiction.

2. Trigger mechanisms

Situations can be initiated before the ICC in three primary ways. First, State Parties (and non-State Parties that accept the Court's jurisdiction on an *ad hoc* basis) can refer situations involving the commission of an ICC crime on the territory or by a national of a State Party to the Court.⁷⁴² Second, the United Nations Security Council can refer situations involving ICC crimes occurring anywhere and committed by any person over 18 years of age to the Court.⁷⁴³ Third, the Prosecutor may *proprio motu* initiate situations involving ICC crimes committed

⁷⁴⁰ See, e.g., Rome Statute, article 27 (excluding Head of State immunity or official capacity as a basis for avoiding liability).

⁷⁴¹ See Schabas (2011), p.125 (describing the process of amending the Rome Statute as "cumbersome"). For example, the adoption of the amendments on the crime of aggression, which was already included in the original Rome Statute subject to future in-filling of its specific parameters, has been a long and contentious process, which will only be finalized in July 2018; see Jennifer Trahan (2016) "An Overview of the Newly Adopted International Criminal Court Definition of the Crime of Aggression", *Journal of International and Comparative Law*, Vol.2: Iss.1, Article 3.

⁷⁴² Rome Statute, articles 12-14.

⁷⁴³ Rome Statute, articles 13-14.

on the territory or by a national of a State Party (or on board a vessel or aircraft registered in a State Party).⁷⁴⁴ This set of jurisdictional trigger mechanisms is a unique feature of the ICC and lays down critical *a priori* parameters for the Court's operations.

Looking to the first trigger mechanism, referrals by State Parties (or self-referrals by non-State Parties that accept the Court's jurisdiction under article 12(3)) concerning environmental harm will operate in the same manner as referrals concerning other crimes under the Rome Statute. Given that environmental harm will likely cover multiple domestic jurisdictions, a State Party could refer an area for the Court's consideration rather than a specific national territory.

The second trigger mechanism, Security Council referrals, could potentially be of particular relevance to environmental harm because they are not limited to the territory of States' Parties.⁷⁴⁵ Serious environmental harm could occur in areas outside of the territory of any State Party or possible State Party. For example, areas like Antarctica,⁷⁴⁶ the high seas, or outer space, could only fall within the Court's jurisdiction if the perpetrator were a national of a State Party or if the Security Council referred the situation to the Court.⁷⁴⁷ Yet these areas are vulnerable to environmental harm.⁷⁴⁸

Antarctica has immense significance from an ecological viewpoint, as it constitutes "26 percent of the world's wilderness area, representing 90 percent of all terrestrial ice and 70 percent of planetary fresh water".⁷⁴⁹ The possibility of humans engaging in environmentally damaging practices in Antarctica is not a remote possibility. Equally, the prospect of oil pollution in the high seas and the dumping of radioactive materials presents a significant risk, as recognised by the adoption of the 1958 High Seas Fishing and Conservation Convention and the 1969 International Convention Relating to Intervention on the High Seas in Cases of

⁷⁴⁴ Rome Statute, article 15.

⁷⁴⁵ Rome Statute, articles 12(2), 13(b).

⁷⁴⁶ Most states consider that Antarctica is part of the global commons and not subject to the exclusive jurisdiction of any state; Philippe Sands (2003), pp.710-711. Conversely, the arctic region is subject to the jurisdiction of certain states, which have formed the Arctic council to address the common concerns facing Arctic governments; Sands (2003), p.711.

⁷⁴⁷ See Rome Statute articles 12, 13; Schabas (2016), p.261; Cherif Bassiouni, *International Extradition: United States Law and Practice*, 2014, p.426; Deborah Ruiz Verduzco, "The Relationship between the ICC and the Security Council", in Stahn (2015), p.35 ("Article 13(b) allows the Council to refer a situation to the Court, activating its jurisdiction regardless of the consent of the state of territory or nationality, which is otherwise constrained to the territories and the nationals of States Parties"). Contra, Schabas (2011), p.82 (arguing that the Court cannot exercise jurisdiction in these circumstances other than on the basis of the nationality of the perpetrator).

⁷⁴⁸ Sands (2003), p.187.

⁷⁴⁹ Sands (2003), p.711.

Oil Pollution Casualties.⁷⁵⁰ Damage and the spoliation of outer space from human activities is also a distinct and growing possibility.⁷⁵¹

In order to refer a situation of environmental harm under Chapter VII, the Security Council would have to determine that the environmental harm constituted or formed part of a threat to international peace, a breach of international peace, or an act of aggression.⁷⁵² The Security Council has, in recent years, passed resolutions dealing with matters going beyond its usual remit of cases of armed conflict.⁷⁵³ The “new” measures that the Security Council is increasingly favouring include counter-terrorism measures,⁷⁵⁴ and international courts.⁷⁵⁵ The Security Council has referred to environmental damage in resolutions, including in relation to Iraq’s invasion of Kuwait in 1990-1991,⁷⁵⁶ the conflict in the Democratic Republic of Congo,⁷⁵⁷ and on the Central African Republic (the preamble of which notes the Security council’s “condemnation of the devastation of natural heritage and noting that poaching and trafficking of wildlife are among the factors that fuel the crisis in the CAR.”)⁷⁵⁸ However, to date, it has not specifically found environmental harm *per se* to constitute a threat to international peace and security. Nonetheless, there is no legal impediment to the Security

⁷⁵⁰ OECD, High Seas Task Force: *Closing the net: Stopping illegal fishing on the high seas* (2006), p.38; Sands (2003), p.449.

⁷⁵¹ Sands (2003), p.382.

⁷⁵² United Nations Charter, article 39 (“The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and security.”).

⁷⁵³ See Alexandra Knight, “Global Environmental Threats: Can the Security Council Save Our Earth?”, *New York University Law Review*, vol.80: 1549-1585, p.1565; Shirley v. Scott, “Climate Change and Peak Oil as Threats to International Peace and Security: Is it Time for the Security Council to Legislate?”, *Melbourne Journal of International Law*, vol.9 (2008), text accompanying footnote 93.

⁷⁵⁴ See, e.g., UNSC Resolution 1373 (2001)—Establishment of Counter-Terrorism Committee (CTC). See also UNSC Resolution 1465 (2003) (condemning bomb attack in Colombia); UNSC Resolution 1526 (2004)—Threats to international peace and security caused by terrorist acts.

⁷⁵⁵ UNSC Resolution 827 (1992) (Establishing an International Tribunal for the Prosecution of Persons Responsible for Serious Violations of International Humanitarian Law Committed in the Territory of the Former Yugoslavia).

⁷⁵⁶ See UNSC Resolution 687, stating in Paragraph 16 that “Iraq is liable under international law for any [...] damage, including environmental damage and the depletion of natural resources [...] as a result of Iraq’s unlawful invasion and occupation of Kuwait”. However, the UN Security Council founded the liability for environmental harm on Iraq’s use of aggressive force (in violation of Article 2(4) of the UN Charter), and did not specify any particular violation of international humanitarian or environmental law. See also UNEP Study (2009), p.27.

⁷⁵⁷ See UNSC Resolution 1376, (2001) in which the Security Council “reiterates its condemnation of all illegal exploitation of the natural resources[...] ... demands that such exploitation cease and stresses that the natural resources of the Democratic Republic of the Congo should not be exploited to finance the conflict in that country.” In UNSC Resolution 2136 (2014), the Security Council repeated its call to the Democratic Republic of the Congo and States in the Great Lakes region to cooperate at the regional level, in order to investigate and combat illegal exploitation of natural resources, including wildlife poaching and trafficking, by regional criminal networks and armed groups.

⁷⁵⁸ UNSC Resolution 2127 (2013), 5 December 2013.

Council determining that a grave environmental crisis constitutes a threat to international peace and security and referring the situation to the Court.⁷⁵⁹

As for the third trigger mechanism, *proprio motu* initiated situations, the Office of the Prosecutor's discretion in this respect may serve as a significant factor in prioritizing the redress of crimes involving large-scale environmental harm. As set out above, the Prosecution's 2016 guidelines on case selection place emphasis on addressing crimes that result in or are perpetrated by means of the destruction of the environment, and thus expand on its 2013 policy paper on preliminary examinations which mentioned environmental harm as one measure of impact of crimes.⁷⁶⁰ Corresponding with this emphasis, the Prosecutor appears likely to place weight on the occurrence of significant environmental harm when determining whether to proceed with a situation *proprio motu* and seek authorisation to open an investigation.

3. Admissibility and complementarity

A critical factor in determining whether the Court can hear a case is admissibility.⁷⁶¹ The legal concept of admissibility concerns possible impediments to the Court hearing a case that falls within its jurisdiction; typically due to the case having been heard already in another jurisdiction, or falling below the minimum level of gravity required for the Court to address the case.

Admissibility of cases before the ICC is inherently linked to the concept of complementarity. The principle of "complementarity" is a unique and important "cornerstone" factor at the ICC.⁷⁶² According to this principle, the efforts of any State (which would normally exercise jurisdiction) to domestically investigate or prosecute crimes are given preference over the ICC proceedings.⁷⁶³ The principle is based on respect for the primary jurisdiction of States and on considerations of efficiency and effectiveness, particularly given states' access to evidence and witnesses relating to crimes committed in their territories.

⁷⁵⁹ Sir Michael Wood, 'The UN Security Council and International Law' (Lecture delivered at Hersch Lauterpacht Memorial Lectures, Cambridge, UK, 8 November 2006) [55], available from at 23 September 2008; Shirley v. Scott (2008), conclusions.

⁷⁶⁰ OTP 2016 Case Selection Paper, para.41.

⁷⁶¹ Cryer et. al. (2010), p.156 ("Article 17(1) renders a case inadmissible before the ICC if a State is investigating or prosecuting the case, unless the Prosecutor can show that the State is in reality 'unwilling' or 'unable' to carry out the ostensible proceedings genuinely.").

⁷⁶² Broomhall et. al., Informal Expert Paper: Fact-finding and investigative functions of the office of the Prosecutor, including international co-operation, 2003 ("Broomhall et. al. (2003)"), para.35.

⁷⁶³ Stephens (2009), p.56.

Cases of environmental harm are prosecuted and litigated in many thousands of domestic courts around the world, including over 300 environmental courts and tribunals that are estimated to be operating.⁷⁶⁴ The widespread potential availability of judicial *fora* to address environmental harm contrasts with the extremely restricted resources available within the international courts that can be directed towards redressing environmental harm. This contrast underscores the significance of encouraging domestic proceedings in accordance with the principle of complementarity, and also highlights the significance of the specific legal test used to determine whether or not a case is being sufficiently addressed at the domestic level.

Admissibility of cases before the ICC is controlled by article 17, pursuant to which a case is only inadmissible where: (1) the case is being investigated by a State which has jurisdiction over it; (2) the case has been investigated by a State which has jurisdiction over it and the State has decided not to prosecute the person concerned;⁷⁶⁵ or (3) the person concerned has already been tried for conduct which is the subject of the complaint and a trial by the Court would not be permitted under article 20(3) of the Statute.⁷⁶⁶

The principle of complementarity will prevent proceedings being undertaken before the ICC where there is sufficient overlap (or “sameness”) between the national case and the case before the ICC.⁷⁶⁷ To assert primacy of domestic proceedings, the domestic authorities must show that the national investigation or prosecution cover the same individual and substantially the same conduct as alleged in the proceedings before the ICC.⁷⁶⁸

⁷⁶⁴ Basel Convention Manual (2012), p.7 citing International Judicial Institute for Environmental Adjudication, 2011 (www.pace.edu/school-of-law/sites/pace.edu.school-of-law/files/press_releases/IJIEArelease.pdf).

⁷⁶⁵ Cryer et. al. (2010), p.156.

⁷⁶⁶ See also Schabas (2011), pp.187-188.

⁷⁶⁷ *Prosecutor v. Saif Al-Islam Gaddafi*, ICC-01/11-01/11-547-Red, Judgment on the appeal of Libya against the decision of Pre-Trial Chamber I of 31 May 2013 entitled “Decision on the admissibility of the case against Saif Al-Islam Gaddafi”, 21 May 2014, paras.71-72. (“The real issue is, therefore, the degree of overlap required as between the incidents being investigated by the Prosecutor and those being investigated by a State - with the focus being upon whether the conduct is substantially the same. Again, this will depend upon the facts of the individual case. If there is a large overlap between the incidents under investigation, it may be clear that the State is investigating substantially the same conduct; if the overlap is smaller, depending upon the precise facts, it may be that the State is still investigating substantially the same conduct or that it is investigating only a very small part of the Prosecutor's case.”).

⁷⁶⁸ *Prosecutor vs. Uhuru Muigai Kenyatta et al.*, ICC-01/09-02/11-274, Judgment on the appeal of the Republic of Kenya against the decision of Pre-Trial Chamber II of 30 May 2011 entitled “Decision on the Application by the Government of Kenya Challenging the Admissibility of the Case Pursuant to Article 19(2)(b) of the Statute”, 30 August 2011, para. 39 (“the defining elements of a concrete case before the Court are the individual and the alleged conduct. It follows that for such a case to be inadmissible under article 17 (1) (a) of the Statute, the national investigation must cover the same individual and substantially the same conduct as alleged in the proceedings before the Court.”). See also para.61 (clarifying that the burden falls on the state making the challenge to demonstrate inadmissibility).

The first two circumstances in article 17 will not apply if the domestic lack of investigation or decision not to prosecute is due to the State's unwillingness or inability to genuinely carry out the investigation or prosecution. The notion of unwillingness arises where (i) the national decision "was made for the purpose of shielding the person concerned from criminal responsibility", (ii) there is an unjustified delay in the circumstances "inconsistent with an intent to bring the person concerned to justice", or (iii) "[t]he proceedings were not or are not being conducted independently or impartially" and "were or are being conducted in a manner [...] inconsistent with an intent to bring the person concerned to justice."⁷⁶⁹ The notion of "inability" concerns circumstances where, "due to a total or a substantial collapse or unavailability of its national judicial system, the State is unable to obtain the accused or the necessary evidence and testimony or otherwise unable to carry out its proceedings."⁷⁷⁰ In those circumstances, the ICC may continue to investigate or prosecute a case notwithstanding the existence of domestic proceedings for substantially the same conduct.

Applying these principles and provisions to situations of serious environmental harm is likely to produce mixed results in terms of admissibility. This is for several reasons. First, States have divergent regulatory regimes in relation to the protection of the environment. Although there is a growing domestic recognition of the severity of environmental harm,⁷⁷¹ legislation and/or enforcement mechanisms are lacking in various areas of the world,⁷⁷² particularly jurisdictions subject to armed or societal conflict.⁷⁷³ Complementarity in the case of environmental harm in these States is likely to see cases assigned to the ICC rather than domestic courts, on the basis that the national systems are unable to address the environmental harm.⁷⁷⁴

⁷⁶⁹ Rome Statute, article 17.

⁷⁷⁰ Rome Statute, article 17(3).

⁷⁷¹ See *R. v Sissen* (2000) All ER (D) 2193 (8 December 2000, Court of Appeal) - Mr Justice Ouseley: "the law is clear as to where the interests of conservation lie. These are serious offences. An immediate custodial sentence is usually appropriate to mark their gravity and the need for deterrence" (a case in which the defendant was imprisoned for 30 months for the illegal import into the EC of the Lear's macaw bird of which only approximately 150 remained in the wild; though the sentence was reduced to 18 months on appeal); WWF Report, Sentencing Wildlife Trade Offences In England And Wales Consistency, Appropriateness And The Role Of Sentencing Guidelines, September 2016, p.25.

⁷⁷² UNEP (2014), p.17.

⁷⁷³ Even in war-ravaged states, there are some arrests for poaching, although this comes with great risks to the life and limb of the park rangers: UNEP (2014), p.10 ("Operation Wildcat in East Africa involved wildlife enforcement officers, forest authorities, park rangers, police and customs officers from five countries – Mozambique, South Africa, Swaziland, Tanzania and Zimbabwe, resulting in 240 kg of elephant ivory seized and 660 arrests.").

⁷⁷⁴ Rome Statute, article 17.

Conversely, in many domestic jurisdictions, the environmental protections are far more developed and rigorously applied than the international laws protecting the environment.⁷⁷⁵ The principle of complementarity is likely to see the ICC defer to domestic proceedings for environmental harm in these States. However, even in those states only certain environmental offences, such as polluting and harming native animals, are covered by legislation, whereas other conduct is not subject to frequent prosecutions. Domestic prosecutions for environmental harm caused by military strikes are rare; there are very few, if any, instances of such prosecutions at the national level.⁷⁷⁶

Complicated questions concerning admissibility may arise in circumstances where environmental harm is being addressed incidentally to anthropocentric charges. It is conceivable that the main anthropocentric crime could be found to be admissible while the environmental aspect could be found to be sufficiently addressed in domestic proceedings.⁷⁷⁷ Conversely, if a crime such as pillage were being tried domestically on a narrow basis which ignored the broader environmental impact of the offending conduct (for example if only the stealing of appliances were charged and the looting and destruction of trees and animals were ignored), then an argument could be made that ICC proceedings addressing the environmental harm would not be substantially the same conduct. However, if the environmental harm were not constitutive of any specific crime (or required to show the elements of any particular mode of liability) under the Rome Statute, the domestic authorities could argue that the additional conduct does not weigh in the complementarity equation as it is not capable of forming a separate charge against the accused. Given that most of the crimes set out in the Rome Statute are anthropocentrically framed, so long as the domestic system addressed the anthropocentric aspects of the crimes charged against an accused (presuming that article 8(2)(b)(iv) was not at issue), complementarity would likely see precedence go to the domestic

⁷⁷⁵ For example, in 2014 observers noted that the criminal prosecution of environmental damage as an enforcement mechanism was growing in prevalence in the US at the domestic level; see, e.g., Daniel Riesel, *Environmental Enforcement Civil & Criminal* (Law Journal Press, Loose Leaf Service) (2014), section 1.07, 1-29 (“the criminal prosecution of environmental crimes may eventually predominate among all environmental enforcement approaches. Nothing catches the regulated community’s attention as the very real threat of criminal prosecution. The spectre of incarceration, enormous fines, and the loss of public esteem are serious consequences for environmental dereliction that may or may not actually harm the environment, as opposed to the regulatory scheme.”)

⁷⁷⁶ See ICRC Study, vol.2, p.848, 861, 872, 887, 907 (noting that no practice was found in the national case law for the rules concerning environmental harm in hostilities).

⁷⁷⁷ The converse situation whereby the anthropocentric crime would be inadmissible but the environmental aspect admissible is unlikely to arise, as the only circumstance in which the court would still have jurisdiction in those circumstances is for charges under article 8(2)(b)(iv), which would mean the environmental harm was being addressed directly and would obviate the need to prosecute it incidentally to anthropocentric charges.

proceedings. In this respect, the admissibility test may reinforce the anthropocentric focus of the Court's cases and jurisprudence.

4. Gravity

Another key element of proceedings at the ICC is gravity. Gravity is a central consideration when deciding whether to proceed with an investigation or prosecution.⁷⁷⁸ A baseline gravity requirement to prosecute environmental harm at the international level fits with the approach taken in public international law precedents (albeit non-criminal proceedings) concerning harm to the environment, which insist on "serious consequences"⁷⁷⁹ or "significant" damage,⁷⁸⁰ and can serve as a justification for the involvement of international legal institutions and mechanisms.

Previously, anthropocentric interests have been the primary focus of gravity assessments. In its decision not to proceed with opening a situation in relation to Iraq, the Office of the Prosecutor noted that "a key consideration is the number of victims of particularly serious crimes, such as wilful killing or rape."⁷⁸¹ It is unclear how environmental harm *per se* would be measured in terms of gravity. Environmental harm will not necessarily involve individual human victims in the same manner as anthropocentric crimes, which could be used by the Defence to argue against the gravity being sufficient. That argument would find support in the Rome Statute's Preamble; the reference to anthropocentric harm contrasts with the lack of any direct reference to eco-centric harm.⁷⁸²

Looking to the specific test that it applied in determining gravity, the Prosecutor will consider four factors: "the scale, nature, manner of commission of the crimes, and their impact."⁷⁸³ Environmental harm meeting the widespread, long-term and severe standards set out in the war crime under article 8(2)(b)(iv) of the Rome Statute will rank highly in terms of scale and impact.⁷⁸⁴ This broad and lasting environmental impact would contrast, for example, with the

⁷⁷⁸ See, e.g., Rome Statute, article 17(1)(d), article 53(1)(c); article 53(2)(c);

⁷⁷⁹ *Trail Smelter case* (1938 and 1941) 3 RIAA 1911, 1973.

⁷⁸⁰ ILC Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, Report of the International Law Commission, 53rd Session, 366, UN Doc, A/56/10 (2001).

⁷⁸¹ ICC-OTP, Response to Communications Received Concerning Iraq (9 February 2006), p.9.

⁷⁸² See *infra* Chapter IV.

⁷⁸³ *Situation on Registered Vessels of Comoros, Greece and Cambodia*, Article 53(1) Report, para.3 (6 November 2014), available at [http://www.icc-cpi.int/iccdocs/otp/OTP-COM-Article_53\(1\)-Report-06Nov2014Eng.pdf](http://www.icc-cpi.int/iccdocs/otp/OTP-COM-Article_53(1)-Report-06Nov2014Eng.pdf) ("Comoros Article 53(1) Report"), para.136.

⁷⁸⁴ See discussion above of whether a conviction could arise for an attack that was launched and which would normally have caused widespread, long-term and severe environmental harm but for unforeseeable reasons did not result in the anticipated harm; *infra* Chapter III.

limited impact attributed to the crimes in Comoros case, concerning the flotilla incident in which Israeli forces allegedly killed 10 persons and injured over 50 more. There it was found that “the crimes did not have a significant impact beyond the immediate victims and their families.”⁷⁸⁵

At the same time, environmental harm is unlikely to occur in isolation, and additional anthropocentric crimes will typically be perpetrated in connection with the environmental destruction. For example, in Iraq the frequent murders, torture, and other violent acts against civilians and others that ISIS has claimed responsibility for, have also been accompanied by reports that ISIS has engaged in extensive environmental destruction through burning and destroying arable land and oil installations.⁷⁸⁶ This combination of anthropocentric and eco-centric harms is likely to be considered together when assessing gravity for the purposes of admissibility before the ICC.

On the relationship between anthropocentric harm and gravity, the *Al-Mahdi* case is instructive. This was the first case focused exclusively on destruction of cultural heritage at the ICC.⁷⁸⁷ In seeking to explain the seriousness of the underlying conduct,⁷⁸⁸ the Prosecution ostensibly appeared to see gravity as inherently interlinked with the suffering of human beings, stating about the Rome Statute crimes that “(t)hese crimes can be perpetrated in various forms, but they all have one common denominator: they inflict irreparable damage to the human persons in his or her body, mind, soul and identity.”⁷⁸⁹ If this link to anthropocentric harm is made a necessary component for a gravity finding, the emphasis when bringing cases is likely to be placed on the human suffering more than the eco-centric harm *per se*. The human suffering arising from a serious offence, such as the extinction of a

⁷⁸⁵ Comoros Article 53(1) Report, para.142. Contra Trial Chamber decision requesting the Prosecution to reconsider; Decision on the request of the Union of the Comoros to review the Prosecutor's decision not to initiate an investigation, ICC-01/13-34, 16 July 2015.

⁷⁸⁶ UNOCHA Iraq report 2016; Schwartzstein (2016).

⁷⁸⁷ Marina Lostal, “The first of its kind: the ICC opens a case against Ahmad Al Faqi Al Mahdi for the destruction of cultural heritage in Mali”, *Global Policy*, 2 October 2015, <https://www.globalpolicy.org/home/163-general/52814-icc-opens-a-case-for-the-destruction-of-cultural-heritage-in-mali.html>.

⁷⁸⁸ Prosecutor Fatou Bensouda, “Arguments for Prosecution at Confirmation Hearing in case of Prosecutor v. Al Mahdi”, 1 March 2016, T.13-14 (In the confirmation of charges hearing, Prosecutor Bensouda stated “[t]he charges we have brought against Ahmad Al Faqi Al Mahdi involve most serious crimes; they are about the destructions of irreplaceable historic monuments and they are about a callous assault on the dignity and identity of entire populations and their religion and historical roots.”).

⁷⁸⁹ Prosecutor Fatou Bensouda, “Arguments for Prosecution at Confirmation Hearing in case of Prosecutor v. Al Mahdi”, 1 March 2016, T.12 (“Madam President, your Honours, the Rome Statute prohibits and punishes the most reprehensible criminal acts: Crimes of genocide, crimes against humanity and war crimes. These crimes can be perpetrated in various forms, but they all have one common denominator: They inflict irreparable damage to the human person in his or her body, mind, soul and identity.”).

species or destruction of a natural world heritage site, would be grave. Identifying specific human victims, and linking the harm they suffer to the environmental event, such as an animal extinction, may be difficult. In this respect, the Court's practice exhibits a prioritization of anthropocentric harm, which may concretize into a formal requirement, further subordinating the significance of environmental harm in the Court's orientation.

C. Investigation, fact-finding and evidence in relation to environmental harm at the ICC

1. ICC procedural framework

In order to prosecute incidents of environmental harm, it is necessary to seek out evidence, determine the causes and results of the harm, and to present evidence during court proceedings establishing criminal responsibility for the offending act beyond reasonable doubt.⁷⁹⁰ Environmental harm is typically a complex and multi-factorial form of criminality.⁷⁹¹ Conducting effective investigations is critical for sound fact-finding, which in turn is necessary in order to obtain relevant and reliable material that can be tendered into evidence during any subsequent proceedings. While the procedures governing investigations and fact-finding are not as rigidly circumscribed as the Court's jurisdiction and trigger mechanisms, there are nonetheless certain rules that must be adhered to and principles that should be followed in order to ensure efficient, effective, and fair legal proceedings. Given the complexity of investigating and prosecuting environmental harm, it is particularly important to adhere to the governing procedural rules and principles in order to ensure that the gathered evidence can be used in any subsequent court proceedings.⁷⁹²

(a) Investigation and fact-finding

The ICC's unique procedural framework throws up significant challenges for the investigation of environmental harm. Drawing from common and civil law sources, while also featuring

⁷⁹⁰ See International Bar Association, *Evidence Matters in ICC Trials*, August 2016, p.9 ("Evidence, from witnesses and other sources, is at the centre of International Criminal Court (ICC or the 'Court') investigations and trials.").

⁷⁹¹ See, e.g., Cusato (2017), text accompanying footnote 43.

⁷⁹² At the quasi-judicial United Nations Claims Commission, which addresses damage caused by Iraq through its invasion of Kuwait in 1991, and which imposes a lower standard of proof than the criminal standard, the failure of the claimant countries to provide sufficient evidence of environmentally linked harm to public health meant that of the approximately 24 billion USD claimed by Iran, Kuwait, Jordan, Saudi Arabia, and Syria for public health damage, only approximately 10 million USD was awarded; United Nations Compensation Commission Governing Council, Report and Recommendations made by the Panel of Commissioners Concerning the Fifth Instalment of "F4" Claims, S/Ac.26/2005/10, 30 June 2005 ("UNCC (2005)").

idiosyncratic procedures originating in the international courts themselves, the ICC's procedures governing the investigation and presentation of evidence must be interpreted and applied in challenging circumstances to address the most serious crimes plaguing the World. However, the rules governing the gathering and presentation of evidence at the ICC are more detailed than, and differ in several respects from, those of the *ad hoc* tribunals, making it important to specifically analyse the terms of the ICC's procedural rules, particularly in relation to environmental harm which is an uncharted area before the Court.

(i) Preliminary examination

There are several procedural steps at the ICC that will be important for the prosecution of environmental harm. The initial stage of the OTP's activities is the preliminary examination.⁷⁹³ During this process, the OTP does not conduct full investigations but instead seeks to determine whether there is a "reasonable basis to believe" that a crime falling within the Court's jurisdiction has occurred, in order to meet the standard to launch an investigation.⁷⁹⁴ At this stage, the Prosecutor may rely on received information; additional information from States, organs of the UN, intergovernmental or non-governmental organizations or other reliable sources and 'written or oral testimony' received at the seat of the Court.⁷⁹⁵ The information can take the form of "a) information on crimes provided by individuals or groups, States, intergovernmental or non-governmental organisations or other reliable sources (also referred to as 'communications'); b) referrals from States Parties or the Security Council, or (c) declarations accepting the exercise of jurisdiction by the Court pursuant to article 12(3) lodged by a State which is not a Party to the Statute."⁷⁹⁶

During the preliminary examination phase of cases of environmental harm, the Office of the Prosecutor is likely to look to recognised entities such as the United Nations Environmental Program (UNEP), or Interpol, as well as domestic environmental authorities, to obtain a view

⁷⁹³ OTP 2013 Preliminary Examination Policy Paper.

⁷⁹⁴ Rome Statute, article 53(1), Rules of Procedure and Evidence, Rule 48; OTP 2013 Preliminary Examination Policy Paper, para.72; Broomhall et. al. (2003), para.20. During preliminary examinations, the Prosecution may also take statements from witnesses, if it deems it appropriate; OTP 2013 Preliminary Examination Policy Paper.

⁷⁹⁵ Rome Statute, article 15(2); OTP 2013 Preliminary Examination Policy Paper, paras.31, 73, 80, 85-87; Broomhall et. al. (2003), para.21.

⁷⁹⁶ Regulation 25, Regulations of the Office of the Prosecutor; OTP 2013 Preliminary Examination Policy Paper, para.73.

of the nature and gravity of the environmental harm, as well as the causative act, and the potential criminality of that act.⁷⁹⁷

Information indicating that a crime falling within the jurisdiction of the court has been committed may be provided to the Prosecution by States Parties to the Rome Statute, or by the Security Council, or from any other source of information obtained by the Prosecution.⁷⁹⁸ When the information provides a reasonable basis to believe that a crime within the court's jurisdiction and admissible before the Court has been committed, the Prosecution shall initiate an investigation unless there are substantial reasons to believe this would not serve the interests of justice.⁷⁹⁹

(ii) Investigation

Whereas at the preliminary examination phase the Prosecution seeks evidence providing a “reasonable basis” to believe one or more Rome Statute crimes has been committed,⁸⁰⁰ at the investigation phase the OTP actively seeks to meet the confirmation of charges test of “sufficient evidence demonstrating substantial grounds to believe” that the charged person has committed one or more of the crimes within the court's jurisdiction.⁸⁰¹ The Prosecutor of the ICC is charged with establishing the truth, and must investigate incriminating and exonerating circumstances equally.⁸⁰²

If the Prosecution initiates an investigation *proprio motu*, it must obtain approval from the Pre-Trial Chamber.⁸⁰³ Upon authorization begin granted to launch an investigation, then the Prosecution will begin to seek further materials that it can eventually use as evidence to prove its case. Investigations are an aspect of ICC proceedings that largely adhere to the common law model (also known as the Anglo-Saxon model).⁸⁰⁴ The Prosecution generally plays the lead role in gathering the evidence and presenting the case to the Judges.⁸⁰⁵ Nonetheless, there are various provisions allowing the judges to play an active role even during the investigative

⁷⁹⁷ See, e.g., Rome Statute, article 15(2); OTP 2013 Preliminary Examination Policy Paper, para.79.

⁷⁹⁸ Rome Statute, articles 13-15.

⁷⁹⁹ Rome Statute, article 53(1).

⁸⁰⁰ Rome Statute, article 15.

⁸⁰¹ Rome Statute, article 61(7).

⁸⁰² Rome Statute, article 54(1)(a). See also Cassese and Gaeta (2008), p.373.

⁸⁰³ Rome Statute, article 15.

⁸⁰⁴ See Cassese and Gaeta (2008) p.370.

⁸⁰⁵ See, e.g. Rome Statute, article 54. There is also provision for national authorities to be requested to carry out investigative steps and provide the resulting information to the courts, as discussed below. Rome Statute, article 42(1); Cryer et. al. (2010), p.437; Schabas (2011), p.261.

stage, and the Defence can commence investigating matters for itself at any time after it has been retained on the case.

Investigations of environmental harm are likely to be largely scientifically oriented,⁸⁰⁶ and thus will likely necessitate the formation of investigative teams containing persons with scientific and technical expertise.⁸⁰⁷ Contracting the assistance of scientific laboratories will also likely be necessary to prove cases of environmental harm, such as to identify the exploited species in a case of wildlife exploitation. This high concentration of technical and scientific evidence will have a major impact on the nature and duration of the investigations undertaken.

There is considerable potential for the degradation or loss of evidence of environmental harm through weather patterns in the case of harm to a specific location, or the disappearance of a population of a protected species in the case of wildlife crime, for example.⁸⁰⁸ Accordingly, it will be important to use all available measures to obtain evidence rapidly and effectively, including the special measures for urgent evidence collection that the judges may approve.⁸⁰⁹

a. Collecting *in situ* evidence

On-site examinations will be important to obtain evidence of environmental harm, including in cases of toxic dumping, military attacks resulting in excessive harm to the environment, and wildlife crime. Investigating environmental harm at the ICC would likely involve taking samples of bio-organic or inorganic matter at the site or sites where the elements of the crime were perpetrated in order to assess the damage caused to the natural environment.⁸¹⁰ For example, in the context of ISIS's alleged burning of oil installations in Iraq in 2016, several potential environmental dangers have been noted,⁸¹¹ but testing and documenting the extent of

⁸⁰⁶ Philippe Sands, "Litigating Environmental Disputes: Courts, Tribunals and the Progressive Development of International Environmental Law", Global Forum on International Investment, (2008) ("Sands (2008)"), p.4 (highlighting the concentration on scientific evidence and issues in environmental cases under public international law).

⁸⁰⁷ Cooper et. al. (2009), p.2.

⁸⁰⁸ See, by analogy, Stahn (2015), p.815, fn.76 (noting that in general that there is "the danger in an unstable post-conflict environment that physical evidence may degrade or be removed").

⁸⁰⁹ See, by analogy, Stahn (2015), p.815, fn.76.

⁸¹⁰ See, e.g., Interpol, Pollution Crime Forensic Investigation Manual, 2014 ("Interpol Investigation Guide"), p.14 (setting out the multiple samples that would be taken in an illegal sewage disposal environmental harm case); Cooper et. al. (2009), p.2.

⁸¹¹ UNEP (2017), p.2; Usato Scorched Earth (noting that "[o]il fires release toxic substances into the air and surrounding area (notably, sulphur dioxide, heavy metals and particulate matter laden with carcinogenic PAHs) that may later permeate the soil and underground aquifers, causing severe and long-lasting harm to the natural environment and the human health.").

the environmental impact will likely require samples from the sites of the burning to ensure that the pollution caused by ISIS's acts can be distinguished from other pollution arising due to independent causes.

Because the potential sites will be diverse and potentially lacking in the laboratory equipment or set-up necessary to test samples, an initial step in the investigation will be determining how to gathering the potential evidence for assessment.⁸¹² A pre-analysis should be undertaken prior to traveling to the relevant scenes to collect specimens and other evidence, in order to ensure that the right equipment and expertise are available for subject matter.⁸¹³ Samples should be collected as rapidly as possible, to avoid the spoliation, damage, or alteration of potential evidence due to rain, wind, other climatic factors, livestock or wild animals, or human interference.⁸¹⁴ Control samples should be taken from upwind or upstream from the source of the environmental harm, such as the disposal site of toxic materials.⁸¹⁵ The investigative team should consider whether systematic sampling is feasible in order to generate robust results on which to base conclusions as to the nature and extent of the environmental harm.⁸¹⁶ Evidence from the crime scene should be collected subject to as rigorous controls as possible in the circumstances, such as crime-scene demarcation, entry-exit register, crime-scene safety (particularly in the case of toxic dumping).⁸¹⁷ Where specific physical locations are examined, it will be important to ensure that they are accessed rapidly as animal tracks and signs can quickly disappear due to the impact of weather, other animals, and humans.⁸¹⁸ Safety precautions must also be taken to avoid “physical attack (bites, scratches, goring), infectious diseases (zoonoses) and envenomation”, as well as attacks by poachers or other hostile groups.⁸¹⁹

To the extent samples have to be tested *in situ*,⁸²⁰ it will be important for investigation teams to have the appropriate competencies in field techniques and the appropriate equipment.⁸²¹ Investigating environmental harm will require a broad range of skills, including complex scientific knowledge. For example, necessary experts may include specialists such as

⁸¹² Cooper et. al. (2009), p.2.

⁸¹³ Interpol Investigation Guide, pp.96-97.

⁸¹⁴ Cooper et. al. (2009), p.2; Cusato (2017), text accompanying footnote 41.

⁸¹⁵ Interpol Investigation Guide, p.100-101.

⁸¹⁶ Interpol Investigation Guide, p.103.

⁸¹⁷ Cooper et. al. (2009), p.3.

⁸¹⁸ Cooper et. al. (2009), p.3.

⁸¹⁹ Cooper et. al. (2009), p.4.

⁸²⁰ Interpol Investigation Guide, p.100; Cooper et. al. (2009), p.4.

⁸²¹ Cooper et. al. (2009), p.2.

ecologists, entomologists, botanists, veterinarians, pathologists, molecular biologists and toxicologists.⁸²² Eurojust noted in relation to wildlife exploitation “only experts can determine with certainty if species found are indeed endangered, the category under which they fall, and whether a penal response to the illegal trade has been triggered.”⁸²³ In relation to toxic dumping, “experts are needed, for example, to decide if certain items qualify as waste, if waste is exported for recovery or re-use...”⁸²⁴ For military attacks causing excessive environmental harm, ballistics and military experts would be necessary to assess the source and nature of the munitions used to harm the environment. Organizing teams of investigators for environmental cases will be resource intensive and require considerable coordination with the relevant authorities in the geographic locations affected by the environmental damage. Ensuring a properly collected and sufficiently extensive basis of potential evidentiary material will be important; as noted in the context of the ICTY review of NATO’s 1999 bombing of Serbian industrial sites, there was a lack of corroborated sources indicating the “extent of environmental contamination caused by the NATO bombing campaign”.⁸²⁵

Appropriate measures would need to be taken to label and preserve these samples and ensure that they are able to be used in court proceedings.⁸²⁶ Preserving investigative evidence typically involves three stages: providing a unique name to the sample; labelling it with meta-data, such as a description, the time and place it was found, and the person who collected it; and storing the sample in a protected location.⁸²⁷ To best facilitate the use of the evidential sample in court, it is important to maintain a record of the chain of custody.⁸²⁸ The chain of custody is the series of persons who have taken possession of or handled the evidential material from the time it was located at the crime scene to the time it was brought to court. Each person is considered a link in this chain. It is advisable to keep the number of people who handle evidence as minimal as possible, in order to reduce the risk of contamination or interference.⁸²⁹ With environmental harm cases likely featuring large amounts of physical

⁸²² Cooper et. al. (2009), p.3.

⁸²³ See, e.g. Eurojust, *Strategic Project on Environmental Crime* (November 2014) (“Eurojust (2014)”), p.11.

⁸²⁴ See, e.g. Eurojust (2014), p.32.

⁸²⁵ Final Report on NATO (2000), para. 17.

⁸²⁶ Interpol Investigation Guide, 2014.

⁸²⁷ Dermot Groome, *The Handbook of Human Rights Investigation* (Human Rights Press) (2011) (“Groome (2011)”), p.102.

⁸²⁸ See Regulations of the Office of the Prosecutor, regulation 22 (“The Office shall ensure an uninterrupted chain of custody of documents and all other types of evidence. All evidence shall constantly be in the possession of the collector or the individual authorised to have possession of the item. The maintenance of the chain of custody shall be recorded and managed in accordance with regulation 23”). See also, e.g. Interpol Investigation Guide (2014), p.105; Cooper et. al. (2009), p.2.

⁸²⁹ Groome (2011), p.103, Cooper et. al. (2009), p.2.

sample type evidence, the chain of custody will be of critical importance. A meticulous chain of custody will help to “minimise the chance of loss or substitution of material and helps to prove the origin and veracity of specimens or exhibits” in any subsequent court proceedings.⁸³⁰

At the international level, problems with access to crime sites and deterioration of evidence make investigating particularly challenging. The concerns compound the difficulties presented by the prevalence of uncooperative governments, security concerns, the lack of military or even policing power to support the investigations, and cultural and linguistic barriers which can interfere with investigative activities.⁸³¹ For anthropocentric crimes, the Prosecution has interviewed diaspora witnesses when its investigators have been unable to access the country in question, as has been the case in Darfur.⁸³² However, this strategy may be insufficient in relation to environmental harm for which access to crime sites or samples from the affected area will more likely be necessary to access the affected sites or animal populations in the territorial country in order to establish the nature and cause of the damage.

Wildlife offences exemplify the importance and difficulty of *in situ* investigative activities and sample acquisition. Investigating wildlife exploitation will typically require the gathering of evidence at the location or locations where the elements of the crimes were conducted. Collecting the evidence in a proper manner will assist the smooth conduct of any subsequent legal proceedings.⁸³³ At the same time, wildlife exploitation may be difficult to investigate *in situ* precisely due to the conditions of conflict which give rise to the Court’s jurisdiction.⁸³⁴ Moreover, the investigation of wildlife exploitation such as the illegal exploitation or trade of endangered species may not necessarily be restricted to one specific locality or crime scene.⁸³⁵ This is because the trade or exploitation is likely to be a process, occurring across several different locations. For example, the “crime scene” of an incident of poaching and illegally trading a rare animal may comprise several countries and even cyber-spaces such as

⁸³⁰ Cooper et. al. (2009), p.2.

⁸³¹ Stahn (2015), pp.329-330.

⁸³² See Statement of ICC Prosecutor, Fatou Bensouda, before the United Nations Security Council on the Situation in Darfur, pursuant to UNSCR 1593 (2005), 13 December 2016, paras.33, 35.

⁸³³ Cooper et. al. (2009), p.1 (“the proper collection, handling and analysis of evidence gathered at such a site will enhance the chances of securing a conviction and/or preventing/discouraging further breaches of the law.”).

⁸³⁴ Cooper et. al. (2009), p.5-6.

⁸³⁵ European Union Action to Fight Environmental Crime (2015), p.20.

websites.⁸³⁶ Wildlife crime can involve individuals at the highest levels of government, in which case security measures for the investigative team will be of paramount importance.⁸³⁷

In relation to wildlife exploitation, the seized materials may include “live” animals, which had been kept in unlawful conditions.⁸³⁸ Investigations teams require the appropriate level of expertise and equipment to hold such specimens until a safe location can be organized for their relocation.⁸³⁹ In this respect, reliance on national authorities will likely be heavy. However, national authorities in countries where the ICC is competent to investigate may well be non-functional due to societal conflict, and may be complicit in the crimes. In such locations, the ability of the Court to conduct its own investigations, including potentially conducting *in situ* specialized technical tests, will be particularly important.⁸⁴⁰

b. Collecting witness evidence concerning environmental harm

Witnesses to the environmentally harmful act will also be valuable sources of evidence. Investigators should seek first-hand witness accounts of events whenever possible.⁸⁴¹ Although hearsay evidence is admissible at the international courts, the best evidence rule dictates that more direct evidence (such as from an eye-witness to an event) will usually be preferred to less direct evidence (such as from a person who was told by an eye-witness about the events).⁸⁴²

Perpetrators of environmental harm often seek to mask their crimes by combining illegal and legal activities. Consequently, it will be important for investigators to gather evidence of the specific conduct of the perpetrators and incidental forms of criminality accompanying the environmental harm to contribute to successful prosecutions of environmental harm.⁸⁴³ For example, with the cross-boundary movement of toxic substances or wildlife, fraudulent or forged documentation is frequently used to cover up or obfuscate the illegal conduct. Ozone-

⁸³⁶ Cooper et. al. (2009), p.1.

⁸³⁷ UNODC Toolkit (2012), p.54.

⁸³⁸ European Union Action to Fight Environmental Crime (2015), p.20.

⁸³⁹ Cooper et. al. (2009), p.2.

⁸⁴⁰ Cooper et. al. (2009), p.5-6.

⁸⁴¹ See *Prosecutor v. Milan Martić*, Case No. IT-95-11-T, 19 January 2006, Decision Adopting Guidelines On The Standards Governing The Admission Of Evidence; Groome (2011), p.39; Interpol Investigation Guide (2014).

⁸⁴² Groome (2011), p.39 (the author somewhat overshoots the mark in claiming that “no circumstances can ever make hearsay testimony more reliable than eyewitness testimony”. In fact, a hearsay witness who spoke to multiple eye-witnesses who subsequently died and who knew the perpetrators well may be a more reliable witness than an eye-witness who was confused or had a strong motivation to mislead the court. Nonetheless, Groome’s underlying point, that the best available evidence should always be collected, remains valid).

⁸⁴³ Rose (2014), p.18.

depleting substances are mis-labelled as coming from recycled sources, and protected species are misrepresented as having been bred in captivity, or even as entirely different species.⁸⁴⁴

Given the potential magnitude of events causing serious harm to the environment, and the multiple ways in which the impact manifest itself, multiple witnesses may be required to provide evidence of the events. For example, trafficking wildlife can involve a complicated matrix of methods, including bribery, violence, and even computer hacking to forge permits.⁸⁴⁵ The prosecution of wildlife traffickers would typically require evidence from witnesses to the capture of the animals or the aftermath of the capture, in addition to scientific evidence identifying the targeted species, witnesses to the transactions by which the animals were trafficked, witnesses able to linked bank accounts or other assets to the trafficking, and witnesses able to establish the person or entity which issued the instructions for the trafficking. If the trafficking were prosecuted as the crime against humanity of other inhumane acts, for example, it would also be necessary to bring witnesses to describe the impact on the local community of the trafficking, as well as the impact on the animal population.⁸⁴⁶ When added to the large number of expert and other witnesses, it becomes clear that environmental harm cases may implicate a vast amount of witness testimony.

In light of the apparent preference for testimony delivered in person that applies at the ICC,⁸⁴⁷ and the drawn-out nature of oral testimony at the ICC, proceedings of this nature could become extremely lengthy. Although there are means of reducing the length of proceedings, particularly through the admission of testimonial evidence in written form,⁸⁴⁸ the trials continue to feature a large number of *viva voce* witnesses appearing live before the Court. This approach would require re-thinking to address instances of environmental harm, which may extend across many sites and involve relatively limited harm being felt by a large number of people across a broad area. The witnesses affected by the harm may also have difficulty explaining the causes and extent of the damage, which may not be readily apparent to the naked eye. In this respect, the diffuse nature of the impact of environmental harm, such as the spread of toxic chemicals or wildlife exploitation, is not directly analogous with the harm caused by anthropocentric crimes, which will typically be felt by specific victims and more amenable to direct witness testimony of its causes and extent.

⁸⁴⁴ Rose (2014), p.14.

⁸⁴⁵ UNEP (2014), pp.13-14.

⁸⁴⁶ See above, Chapter II (on crime against humanity of Other Inhumane Acts).

⁸⁴⁷ Rome Statute, article 69(2).

⁸⁴⁸ See ICC Rules of Procedure and Evidence, rule 68.

c. Insider witness evidence concerning environmental harm

Frequently the accused before the international courts are not the direct physical perpetrators of crimes, but instead are high-level, powerful figures, charged with ordering, inducing, or otherwise contributed to the crimes. Attributing environmental harm to specific perpetrators will often be difficult because of the multi-factorial causes of environmental harm.⁸⁴⁹ To the extent the identification of direct physical perpetrators would be difficult, linking the crimes of those perpetrators to any senior commanders or superiors responsible for the crimes would likely be an even more challenging endeavour.

Establishing responsibility in these circumstances would likely require evidence from members of the perpetrator forces, known as insiders, or as informants.⁸⁵⁰ Environmental cases such as for toxic dumping or harmful practices by corporations and other organized groups will typically depend on information provided by employees or members of those organizations to detail the extent of the knowledge of the harmful environmental results on the part of other members of the organization. Access to insider witnesses, or at least internal documents, from the violating entity, would assist with the prosecution of a director of a company which had carried out sufficiently grave environmental harm to be prosecutable under international criminal law.⁸⁵¹

In addition to insider witnesses in the typical sense of perpetrators or accomplices in crimes, proving environmental harm will typically require evidence from members of government agencies, such as environmental ministries, as to the nature and extent of the environmental destruction. However, the Court lacks the power to subpoena individuals to testify at the seat of the ICC.⁸⁵² This lacuna is somewhat mitigated by the Court's ability to order States Parties to ensure that individuals give evidence from within their territory.⁸⁵³ Nonetheless, as far as insider witnesses are concerned, simply appearing in their home territory may not be sufficient to encourage them to provide full and frank testimony. This will particularly be the case if the allegations are made against governmental figures - whose armed agents will be

⁸⁴⁹ McLaughlin (2000), pp.397-398; Cusato (2017), text accompanying footnote 43.

⁸⁵⁰ UNODC Toolkit (2012), p.85.

⁸⁵¹ McLaughlin (2000), p.402.

⁸⁵² The Court can request States to have witnesses provide evidence *in situ*, even against the witnesses' desires, but cannot demand that the witnesses be sent to The Hague to testify; *Prosecutor v. William Samoei Ruto and Mr Joshua Arap Sang*, ICC-01/09-01/11-1598, Judgment on the appeals of William Samoei Ruto and Mr Joshua Arap Sang against the decision of Trial Chamber V (A) of 17 April 2014 entitled "Decision on Prosecutor's Application for Witness Summonses and resulting Request for State Party Cooperation" ("Ruto and Sang Appeal Decision on Witness Summons").

⁸⁵³ Ruto and Sang Appeal Decision on Witness Summons.

accompanying the insider witness to their testimony *in situ*, which is not conducive to eliciting a full and frank account from the witness. Lacking a full subpoena power, the court is not equipped with the machinery to ensure adjudicative coherence for complex cases requiring evidence from reluctant witnesses. This issue is not unique to the prosecution of environmental harm, but it exacerbates the myriad other difficulties that arise in seeking to redress environmental damage under the ICC framework.

(iii) Judicial involvement in investigations

The role of the judiciary in the investigation of environmental crimes is potentially highly significant. While proceedings at the ICC have been party-driven to date, the Rome Statute bestows upon the judicial branch a close supervisory function along with participatory powers in the process of evidence collection.⁸⁵⁴

During the investigative phase of proceedings, the Prosecutor must inform the Pre-Trial Chamber if circumstances jeopardize the subsequent availability of the evidence at trial, and may request the judges for permission to take measures to acquire a statement or collect or test evidence.⁸⁵⁵ If the Prosecutor fails to seek such measures without good reason, the Pre-Trial Chamber may do so *proprio motu*.⁸⁵⁶ The Pre-Trial Chamber may also take measures for the preservation of evidence and to authorise investigative steps within the territory of State Parties without having secured cooperation from those states.⁸⁵⁷ For serious environmental harm, these options provide important means of gathering evidence where the usual procedure entails excessive risk of losing the evidence.

The judiciary's powers during the investigative phase carry through to the trial phase of proceedings. Under the Rome Statute, the trial chamber may "require the attendance and testimony of witnesses and production of documents and other evidence",⁸⁵⁸ and it may "order the production of evidence in addition to that already collected prior to trial or

⁸⁵⁴ See, e.g., Rome Statute, articles 56 and 57. See also Cryer et. al. (2010), p.436-439.

⁸⁵⁵ Rome Statute, article 56. Article 56 proceedings are being increasingly utilized at the ICC, including in circumstances where traumatized witnesses may no longer be able to provide their evidence by the time of trial; see Decision of the Single Judge in the case of *Prosecutor v. Dominic Ongwen*, ICC-02/04-01/15-277-Conf, ICC-02/04-01/15-316-Conf; Application of Prosecution in the Judge in the case of *Prosecutor v. Dominic Ongwen*, ICC-02/04-01/15-310-Conf, paras.21-44 (wherein the Prosecution made factual submissions showing the various pressures facing female witnesses).

⁸⁵⁶ Rome Statute, article 56(3).

⁸⁵⁷ Rome Statute, article 57(3)(c).

⁸⁵⁸ Rome Statute, article 64(6)(b).

presented during the trial by the parties”.⁸⁵⁹ The trial chamber has the power to “request the submission of all evidence that it considers necessary for the determination of the truth”,⁸⁶⁰ and may take judicial notice of facts of common knowledge without the parties submitting evidence to this effect.⁸⁶¹ Judges may order expert witnesses to appear, as indeed was done in the first two cases before the court – *Lubanga* and *Katanga*.⁸⁶² These procedural mechanisms provide the Judges with significant powers and avenues to control and contribute to the collection and presentation of evidence.

In cases of anthropocentric charges, the traditional party-led investigative process has been predominant in international proceedings, and judges have tended to only adduce evidence to supplement areas insufficiently explored.⁸⁶³ Conversely, in the context of environmental harm, it may be appropriate to have a judge-led investigative process; a more active judicial role in proceedings, including a limited role during investigations is provided for under the Rome Statute.⁸⁶⁴ State cooperation is a particularly acute need in environmental harm investigations, and active judicial participation at the investigative stage may enhance States’ willingness to facilitate the court’s requests.⁸⁶⁵ Already, after a small number of trials at the ICC, the suggestion that Judges should play a more proactive role in running proceedings has been made.⁸⁶⁶

The primary reason to involve Judges in investigations is the large amount of technical and expert evidence that is likely to dominate an environmental harm prosecution.⁸⁶⁷ If Judges are not closely following, and preferably involved in collecting, this type of information from the outset, they will lack a developed awareness on the nature of the scientific materials and

⁸⁵⁹ Rome Statute, article 64(6)(d).

⁸⁶⁰ Rome Statute, article 69(3).

⁸⁶¹ Rome Statute, article 69(6).

⁸⁶² *Lubanga* article 74 Decision, para.11; *Katanga* article 74 Decision, para.21.

⁸⁶³ See Schabas (2011), p.313 (citing the comments of one ICC Judge in the context of a confirmation hearing: ‘[t]he Chamber, in any case, has one remit – and only one remit – and that is to establish the truth[,] and the objective of this confirmation hearing is to supplement the adversarial debate between the parties’; *Lubanga* (ICC-01/04–01/06), Transcript, 27 November 2006).

⁸⁶⁴ See, in general, Cryer et. al. (2010), p.436. An example of judge-led investigations is the statute of the African Court of Human and Peoples’ Rights, in which judges are expressly given the power to carry out investigations and where environmental crimes like toxic dumping are included within the court’s jurisdiction “The Court may, at any time during the proceedings, assign one or more of its Members to conduct an enquiry, carry out a visit to the scene or take evidence in any other manner.” At the ICTY, Rule 98 allows the Judiciary to call witnesses *proprio motu*, but does not expressly provide chambers with the power to carry out investigations.

⁸⁶⁵ Cryer et. al. (2010), p.436.

⁸⁶⁶ Stahn and Sluiter (2009), pp.487-488.

⁸⁶⁷ Sands (2008), p.4.

testimony when they are adduced in court as evidence.⁸⁶⁸ A loss of efficiency is likely to result, as the Judges will significantly lag behind the parties in their familiarity with and understanding of the key scientific evidence.⁸⁶⁹ Already Professor Robert Heinsch has called for a more active judicial engagement, stating “(i)t is essential to find a way in which the judges of the ICC can be informed properly, thus being able to take active steps during proceedings.”⁸⁷⁰ In terms of the test set out above of adjudicative coherence, the spectre of extended trials, with judges struggling to catch up with vast bodies of expert and technical evidence that the parties have pondered over for months, would start to infringe on the delicate equilibrium that makes up an international trial.

The Rome system also provides a firm basis for judicial involvement in investigative activities through the mechanism of site visits.⁸⁷¹ Site visits by the judicial panel addressing the charges of environmental harm would be an important means of familiarizing the finders of fact with the locations in which the alleged destruction occurred.⁸⁷² For example, in investigating military attacks resulting in excessive harm, allowing the judges to view the damage *in situ*, would enhance their appreciation of the topography and potential directional provenance of the munitions causing the damage. In assessing the environmental damage caused by Iraq during its invasion and occupation of Kuwait, the UNCC undertook site visits to Kuwait to assess the nature and extent of the environmental damage resulting from Iraq’s invasion and occupation of Kuwait; evaluate the technical feasibility, reasonableness and cost-effectiveness of the remediation measures proposed by Kuwait; and to identify possible remediation alternatives.⁸⁷³ These site visits were explicitly relied upon by the Panel in

⁸⁶⁸ See Robert Heinsch, “How to achieve fair and expeditious trial proceedings before the ICC: Is it time for a more judge-dominated approach?” in Stahn and Sluiter (2009), p.488 (“the judges will never be able to play such a proactive role when they are not properly informed about the background of the case”).

⁸⁶⁹ See Heinsch in Stahn and Sluiter (2009), p.489.

⁸⁷⁰ See Heinsch in Stahn and Sluiter (2009), p.489.

⁸⁷¹ There is no specific provision in the Statute or Rules providing for site visits, but they have been ordered in the past under the chamber’s general powers under article 64, 69, 74 and Rule 132; *Prosecutor v. Germaine Katanga and Mathieu Ngudjolo*, Decision on the Judicial Site Visit to the Democratic Republic of Congo, 1 December 2011, p.1.

⁸⁷² In Katanga, the Trial Chamber noted the importance of the judicial site visit, particularly in evaluating the environment where the alleged crimes occurred, stating “aside from the opportunity thus afforded to the Chamber to gain a better understanding of the context of the events before it for determination, the main purpose of the site visit was to enable the Chamber to conduct the requisite verifications in situ of specific points and to evaluate the environment and geography of locations mentioned by witnesses and the Accused persons.”; *Katanga* article 74 Decision, para.108.

reaching its findings that oil contamination caused by Iraq's forces in Kuwait had caused significant damage to the environment.⁸⁷⁴

(iv) State cooperation in the investigation of environmental harm

In domestic settings, where investigators enjoy the support of police forces, investigating environmental damage is difficult. Before the ICC, which lacks a deployable police force, and must usually seek state consent to conduct investigative activities, the prospect of investigating environmental harm is a daunting challenge. As with the prosecution of other crimes before the ICC,⁸⁷⁵ the prosecution of environmental harm will rely heavily on state cooperation.⁸⁷⁶ Like the other international tribunals, the ICC does not have its own police force on the ground in territories where the crimes occur. Accordingly, it must use a variety of diplomatic, political and pragmatic means to obtain the necessary evidence to proceed to trial.⁸⁷⁷ State cooperation is critical for access to evidence.⁸⁷⁸

Proceedings for environmental harm will generally require extended access to locations relevant to the causation and effects of the environmental harm. Although aerial photos and remote sensing of data, such as smoke plumes,⁸⁷⁹ could provide an indication of the damage, real evidence, such as samples of organic materials from the harmed area or even dead animals that have been trafficked, would typically be a primary means of establishing the extent of the damage. For example, in the investigation of allegations of the use of chemical weapons in Syria, it was only after representatives of the Organization for the Prevention of

⁸⁷³ United Nations Compensation Commission Governing Council, Report and Recommendations made by the Panel of Commissioners Concerning the Fourth Instalment of "F4" Claims, part two, S/Ac.26/2004/17, 9 December 2004, Para.45 ("UNCC (2004)").

⁸⁷⁴ UNCC (2004), Para.73 ("Site visits to the affected areas confirm that the existing damage from oil contamination is severe since hardly any live vegetation is currently present in either areas of wet or dry oil contamination or in piles of oil contaminated material. The barren oil-contaminated areas stand in sharp contrast to the surrounding desert areas, which have experienced ecological recovery. In addition to the visible damage to vegetation and soil, the oil lakes continue to impair water transport and nutrient cycling because water is unable to penetrate the pools of oil and crusts of weathered sludge that cover the oil lakes.").

⁸⁷⁵ Broomhall et. al. (2003), para.4.

⁸⁷⁶ See International Bar Association, Evidence Matters in ICC Trials, August 2016, p.10 ("With respect to evidence, the central role of state cooperation at the ICC impacts investigations because cooperation is necessary for the Court to have access to evidence").

⁸⁷⁷ Schabas (2011), p.286; Broomhall et. al. (2003), para.8.

⁸⁷⁸ As noted by a group of informal experts convened to examine the Court's investigative functions: "unrestricted access to all forms of evidence by the ICC Prosecutor and the full co-operation of States is vital to the successful and fair functioning of the International Criminal Court." Broomhall et. al. (2003), para.4.

⁸⁷⁹ See Earle (1992) cited in Schmitt (1997), p.19. See also Popović (1995-1996), p.70. (noting that the air pollution from the burning of the Iraqi oil wells in 1991 could be seen from as far away as the Himalayas).

Chemical Weapons went to Syria to investigate that it was able to declare that the attacks indeed involved chemical weapons.⁸⁸⁰

Unlike the *ad hoc* tribunals, which have binding powers over all UN member states due to their founding resolutions being passed under Chapter VII,⁸⁸¹ the ICC is a treaty-based institution. At the ICC, member States voluntarily take on commitments by signing the Rome Statute. Even for member States, the relationship with the court is more horizontal than the vertical relationship that the *ad hoc* Tribunals for the former Yugoslavia and Rwanda enjoy with States.⁸⁸² Some ICC cooperation obligations are explicitly mandatory, whereas some are expressed as being subject to collaborative negotiation between the relevant State or States and the Court.⁸⁸³

Several of the Court's cooperation provisions are relevant to environmental harm. During the investigative phase of proceedings, the Court may take measures to acquire a statement or collect or test evidence if circumstances jeopardize the subsequent availability of the evidence at trial.⁸⁸⁴ In article 93, the Rome Statute sets out a series of investigative and prosecutorial steps that the Court may request and that State Parties "shall" comply with.⁸⁸⁵

The sub-provisions of article 93 are worded broadly, with terms such as "taking evidence" and "examination places or sites" and "any other assistance" being capable of covering

⁸⁸⁰ See OPCW Press Release, "OPCW Fact-Finding Mission Confirms Use of Chemical Weapons in Khan Shaykhun on 4 April 2017", 30 June 2017 (<https://www.opcw.org/news/article/opcw-fact-finding-mission-confirms-use-of-chemical-weapons-in-khan-shaykhun-on-4-april-2017/>).

⁸⁸¹ See ICTY Statute, article 29; paragraph 4 of Security Council resolution 827 (1993); *Prosecutor v. Blaskić*, "Judgement on the Request of the Republic of Croatia for Review of the Decision of Trial Chamber I of 18 July 1997", 29 October 1997, para.26 ("The Security Council, the body entrusted with primary responsibility for the maintenance of international peace and security, has solemnly enjoined all Member States to comply with orders and requests of the International Tribunal.")

⁸⁸² Karim Khan et. al., *Principles of Evidence in International Criminal Justice*, (Oxford University Press) (2010) ("Khan et. al. (2010)", p.261. Cf. Hans Peter Kaul who refers to the ICC's jurisdiction as "subordinated" to national courts; Judge Hans-Peter Kaul, "The International Criminal Court – Its relationship to domestic jurisdictions", in Stahn and Sluiter (2009), p.34.

⁸⁸³ Khan et. al. (2010), p.242.

⁸⁸⁴ Rome Statute, article 56.

⁸⁸⁵ Rome Statute, article 93(1). ((a) The identification and whereabouts of persons or the location of items; (b) The taking of evidence, including testimony under oath, and the production of evidence, including expert opinions and reports necessary to the Court; (c) The questioning of any person being investigated or prosecuted; (d) The service of documents, including judicial documents; (e) Facilitating the voluntary appearance of persons as witnesses or experts before the Court; (f) The temporary transfer of persons as provided in paragraph 7; (g) The examination of places or sites, including the exhumation and examination of grave sites; (h) The execution of searches and seizures; (i) The provision of records and documents, including official records and documents; (j) The protection of victims and witnesses and the preservation of evidence; (k) The identification, tracing and freezing or seizure of proceeds, property and assets and instrumentalities of crimes for the purpose of eventual forfeiture, without prejudice to the rights of bona fide third parties; and (l) Any other type of assistance which is not prohibited by the law of the requested State, with a view to facilitating the investigation and prosecution of crimes within the jurisdiction of the Court.)

virtually any investigative activity conceivable.⁸⁸⁶ These sub-provisions also appear to be interpreted broadly in practice – ICC investigators operate in several countries, taking statements and collecting copies of evidence, typically with the acquiescence of those countries. United Nations Peacekeepers have also been permitted to conduct searches on behalf of the ICC in the Democratic Republic of Congo, where the ICC has an open situation for investigation.⁸⁸⁷ The assistance of peacekeepers can expand the investigative options available to ICC teams present in the field, through the added security and access to terrain that is difficult to reach due to topographical features or potential land-mines and other dangerous remnants of war. For environmental harm, where access to the site of damage may be essential, the involvement of UN peacekeepers is a highly significant factor.

When putatively applied to a hypothetical case of environmental harm, it is notable that the terms used in article 93 indicate a preconception of prosecuting anthropocentric crimes. For example, article 93 refers explicitly to the “exhumation and examination of grave sites”, which is a common feature of prosecutions for anthropocentric crimes such as murder or extermination. While the other sub-provisions of article 93 are neutrally worded in this respect, they do not explicitly refer to activities that would be central to most environmental harm cases, such as taking samples of organic and inorganic matter, although this would be encompassed by article 93’s reference to “the taking of evidence”⁸⁸⁸ and “the execution of searches and seizures”.⁸⁸⁹ The wording of the Rome Statute concerning assistance for investigations indicates that eco-centric prosecutions were not at the forefront of the framers’ minds when establishing the guiding instrument of the court.

The ICC can undertake such *in situ* investigative activities without the State Party’s consent, for example if there are no authorities capable of fulfilling a request for cooperation sent under part 9 (on cooperation) of the Statute,⁸⁹⁰ or if the measures do not involve the use of compulsory measures, for example voluntary interviews with witnesses or inspection of grave sites without modifying them.⁸⁹¹ A State could seek to reject applications for such assistance

⁸⁸⁶ See, e.g., Broomhall et. al. (2003), para.61, referring to article 93(1)(l) as a catch-all provision.

⁸⁸⁷ Khan et. al. (2010), p.253 referring to Memorandum of Understanding Between the United Nations and the International Criminal Court concerning Cooperation between the United Nations Organization Mission in the Democratic Republic of the Congo (MONUC), and the International Criminal Court, article 16.

⁸⁸⁸ Rome Statute, article 93(1)(b).

⁸⁸⁹ Rome Statute, article 93(1)(h).

⁸⁹⁰ Rome Statute, article 57(3)(d); Khan et. al. (2010) pp.247-248. This article requires the Court to seek the views of the involved State insofar as possible.

⁸⁹¹ Rome Statute, article 99(4); Khan et. al. (2010) p.247.

if contrary to an “existing fundamental legal principle of general application”⁸⁹² or if the measures would threaten national security,⁸⁹³ but that may also require the State to provide some detail as to the nature of the threat it faces. States seeking to limit the intrusiveness of international investigations may link any searches to possible breaches of their national security interests, particularly if the site of the alleged environmental harm were government owned. Under article 72(a)(iii) of the Rome Statute, a failure of the Government to provide the requested information would allow the Court to draw an adverse inference against it, as well as the benefiting party or both parties.⁸⁹⁴

Access to facilities from which individuals and organisations engage in the environmentally deleterious conduct will be of critical importance to the success of investigations for environmental damage in many circumstances. Surprise searches, which are an important means to investigate domestic environmental harm, are likely to cause significant fall-out if not carefully planned in advance with the relevant domestic authorities. Such searches are labour-intensive and require considerable coordination, as described by an expert on domestic environmental law:

“searches are often carried out by teams of agents literally swarming over the facility. Agents will often attempt to take advantage of the element of surprise incident to a search and the absence of counsel. Statements will be sought from all who can be induced to speak. Professionally executed searches will be persistent and pervasive; voluminous records essential to the business will often be seized. In environmental cases, extensive samples from sundry places will be obtained.”⁸⁹⁵

On-site searches were found to be sufficiently important for investigations at the ICTY, that a Trial Chamber issued warrants for the Prosecution to conduct searches through Government offices across Bosnia.⁸⁹⁶ The Prosecutor used this power days later to search multiple government buildings and seize thousands of pages of documents for removal to the Tribunal

⁸⁹² Rome Statute, article 93(3).

⁸⁹³ Rome Statute, articles 72, 93(3); Khan et. al. (2010) p.248.

⁸⁹⁴ Schabas (2011), pp.318-319.

⁸⁹⁵ Riesel (2014), section 7.02[5], 7-27.

⁸⁹⁶ *Prosecutor v. Kordić and Čerkez*, Case No.IT-95-14/2-T, Decision stating Reasons for Trial Chamber’s Ruling of 1 June 1999 Rejecting Defence Motion to Suppress Evidence, 25 June 1999; Khan et. al. (2010) p.254.

in The Hague, having informed the Bosnian authorities on the morning of the searches of the upcoming search operations.⁸⁹⁷

Environmentally harmful conduct may well be undertaken by public authorities. If so, the possibility escalates that the State will invoke national security interests as a shield to prevent disclosure or use of information demonstrating the State's involvement in the harmful practice. In such cases, the ICC's subordination to States' interests will prove an obstacle to the effective investigation and prosecution of environmental harm. In this respect, the delicate litigation balance is tilted excessively in one direction, resulting in a potential adjudicative impasse with no effective remedy other than reporting to external bodies.⁸⁹⁸

(b) Confirmation of charges, commencement of trial, and expeditious proceedings at the ICC

(i) Arrest warrant, initial hearings and confirmation of charges

The Prosecution can request an arrest warrant when there are reasonable grounds to believe that the named person has committed a crime within the court's jurisdiction.⁸⁹⁹ If the person is apprehended then they will appear at a hearing in the custodial domestic state in order to verify basic facts concerning their identity and the course of the arrest, before being transferred to the ICC.⁹⁰⁰ Following the person's appearance at the Court, a confirmation hearing is held, in which the Prosecution must provide sufficient evidence to establish substantial grounds to believe that the person committed the crime charged.⁹⁰¹

Proving environmental harm is likely to require significant scientific and technical evidence,⁹⁰² which will be suitable for expert testing before the courtroom. The confirmation hearing is the first stage of proceedings at which the Defence is likely to challenge specific evidentiary and factual issues concerning environmental harm. At the confirmation hearing, the parties may introduce the evidence of witnesses, including expert witnesses, and introduce evidence of the extent and nature of the environmental harm, as well as the accused's criminal

⁸⁹⁷ *Prosecutor v. Kordić and Čerkez*, Case No.IT-95-14/2-T, Submission of Declarations in Connection with Rule 95 Hearing on 31 May 1999; Khan et. al. (2010) pp.254-255.

⁸⁹⁸ Under article 72(7), the Court may refer a State invoking national security interests to the United Nations Security Council or to the Assembly of State Parties.

⁸⁹⁹ Rome Statute, article 58.

⁹⁰⁰ Rome Statute, article 59.

⁹⁰¹ Rome Statute, article 61.

⁹⁰² Sands (2008), p.4.

responsibility therefor.⁹⁰³ For complex proceedings, this may become a lengthy and resource-intensive process.

The Prosecution and Judges will face pressure to exclude facets of environmental harm that are not central to the charged crimes against the accused in order to speed up and streamline proceedings. Unless the charged crime is military attacks expected to cause excessive harm to the environment under article 8(2)(b)(iv), the core harm underlying the charged crimes will be anthropocentric in nature, and the collateral environmental harm will present a possible area to cut from proceedings. In this respect, the graduated series of tests that are designed to filter out unmeritorious cases will have a particularly exclusionary impact on environmental harm before the Court when charged

(ii) Trial proceedings

If a case reaches the trial stage, the collected materials that the parties consider relevant and probative will be tendered before the Court.⁹⁰⁴ In all cases thus far, it has been the Prosecution first presenting evidence intended to show the accused's responsibility for the charged crime(s), and the Defence then presenting its case, or else presenting a motion for no case to answer to have the trial discontinued without having to present a case.⁹⁰⁵ In this sense, the trials held so far at the ICC have essentially followed an adversarial model.⁹⁰⁶

Several other aspects of ICC proceedings are reflective of common law legal systems. Judges typically assume the role of neutral arbiters between the parties, and appeals proceedings are corrective in nature rather than serving as an opportunity for a trial de novo.⁹⁰⁷ In-court proceedings usually follow the adversarial paradigm of examination-in-chief, cross-examination, and re-examination.⁹⁰⁸ Despite the generally adversarial nature of ICC trials, in

⁹⁰³ Rome Statute, article 61(5). Typically, the witness evidence will be submitted in a prior recorded form, though in exceptional circumstances the parties may call live witnesses at the confirmation hearing; ICC Chambers' Practice Manual, May 2017, p.14 ("use of live evidence at the confirmation hearing should be exceptional and should be subject to specific authorisation by the Pre-Trial Chamber. The parties must satisfactorily demonstrate that the proposed oral testimony cannot be properly substituted by a written statement or other documentary evidence.").

⁹⁰⁴ Rome Statute, article 69(3).

⁹⁰⁵ See *The Prosecutor v. William Samoei Ruto and Joshua Arap Sang*, ICC-01/09-01/11-2027-Red-Corr, Decision on Defence Applications for Judgments of Acquittal, 5 April 2016.

⁹⁰⁶ See Cryer et. al. (2010), p.464; Cassese and Gaeta (2008), p.369-370.

⁹⁰⁷ Rome Statute, article 81; *Lubanga* Appeal Judgment, para.27.

⁹⁰⁸ See, e.g., *Prosecutor v. Laurent Gbagbo and Charles Blé Goudé*, Directions on the conduct of the proceedings, ICC-02/11-01/15-205, 3 September 2015 (providing the following general order for the questioning of witnesses: (1) examination by the calling party, during which questions are neutral, (2) examination by the

several important respects they deviate from typical common law procedures and incorporate civil law approaches.⁹⁰⁹ There is no jury of lay people to act as the ultimate arbiters of factual questions. Instead of empanelling juries, professional Judges are entrusted with deciding all legal and factual matters.⁹¹⁰ Moreover, at the ICC, as with the Special Tribunal for Lebanon and Extraordinary Chambers in the Courts of Cambodia, victims can participate in their own right, including by presenting evidence going to the guilt or innocence of the accused.⁹¹¹

Chambers are accorded extensive flexibility in determining which evidence to admit.⁹¹² This flexibility is important for the adjudication of environmental harm, as the relevant evidence will potentially be broad-ranging, from samples collected at the scene of the environmental harm, to scientific studies of the impact of the damage, to witness evidence of orders and instructions issued by the accused, along with many other related materials.

(c) Ensuring expeditious proceedings in the case of environmental harm

Investigating and prosecuting environmental harm before the ICC presents considerable difficulties in light of the requirement to ensure expeditious proceedings.⁹¹³ The Office of the Prosecutor has set out new investigative policies in its most recent Strategic Plan. It has stated that it will (i) move from its previous “focused” investigative approach to “open-ended, in-depth investigations”; (ii) move towards a “building-upwards” strategy where culpability of the most responsible persons can not be sufficiently proven from the outset; and (iii) seek to be as trial-ready as possible from earliest phases of proceedings, such as when requesting a warrant of arrest and no later than the confirmation of charges hearing.⁹¹⁴ In relation to environmental harm, the third prong of the new Prosecution strategy may be problematic.

non-calling party, during which leading questions are permissible, (3) possible examination by the Legal Representative of Victims, and (4) in exceptional circumstances, re-examination by the calling party).

⁹⁰⁹ Cassese and Gaeta (2008), p.371.

⁹¹⁰ Rome Statute, article 74(5).

⁹¹¹ Rome Statute, article 68(3); see *infra* Chapter IV. See also Matthew Gillett, “Victim Participation at the International Criminal Court” *Australian International Law Journal* (September 2010), pp.39-45; Matthew Gillett, “The Special Tribunal for Lebanon Swiftly Adopts its Rules of Procedure and Evidence” *Journal of International Criminal Justice* (October 2009), pp.901-904.

⁹¹² D.K. Piragoff, “Evidence”, in R.S. Lee (ed.), *The International Criminal Court – Elements of Crimes and Rules of Procedure* (2001), p.351; Reinhold Gallmetzer, “The Trial Chamber’s discretionary power and its exercise in the trial of Thomas Lubanga Dyilo” in Stahn and Sluiter (2009), p.507.

⁹¹³ See, e.g., Rome Statute, article 67(1)(c).

⁹¹⁴ OTP Strategic Plan 2016-2018, p.9.

Environmental harm is typically long-term, dynamic, and multi-factorial.⁹¹⁵ The impact of the harm manifests over an extended period of time, often changing in intensity and nature, and often influenced by several factors, including the activities of human beings in the midst of conflict.⁹¹⁶ For these reasons, a prior Secretary-General of the United Nations has noted that “it is not easy to know in advance exactly what the scope and duration of some environmentally damaging acts will be...”⁹¹⁷ For example, the large-scale poaching of a rare species may result in harm that impacts the species over several generations by reducing its genetic variation and rendering it more vulnerable to extinction through diseases. At the same time, if charges and evidence cannot be augmented and adjusted on as the proceedings continue, the litigation may focus on environmental harm that is no longer pertinent, or turns out to be less serious than first feared, by the time of judgement and/or the outcome of the appeal. The Prosecution is constrained by the Appeals Chamber’s strong guidance that the Prosecution’s case should be largely completed by the time of the confirmation hearing,⁹¹⁸ and a clear view of the charges is necessary for the Defence to be able to conduct its trial preparations.

It will be necessary in some cases to obtain longitudinal studies to demonstrate the nature of the damage and how the damage manifested in the environment over time, as well as the severity of the damage. However, an investigation cannot be delayed indefinitely while long-term studies are undertaken. Although there is no specific length of time within which an investigation must be completed, the longer the delays in bringing a case to trial, the greater the risk of other forms of evidence, such as witness accounts, being degraded due to diminishing memories, ill-health, death, or improper interference.

In this sense, the Prosecution’s strategic approach, though in accordance with the general tenor of the judicial guidance emerging from the ICC on trial-readiness, is potentially incompatible with prosecuting environmental harm. This may lead to adjudicative

⁹¹⁵ See, e.g., Final Report on NATO (2000), para.16 (referring to the Balkans Task Force report on the environmental harm caused during NATO’s bombing campaign “Part of the contamination identified at some sites clearly pre-dates the Kosovo conflict, and there is evidence of long-term deficiencies in the treatment and storage of hazardous waste”); para.17 (“it is quite possible that, as this campaign occurred only a year ago, the UNEP study may not be a reliable indicator of the long term environmental consequences of the NATO bombing, as accurate assessments regarding the long-term effects of this contamination may not yet be practicable.”); UNCC Recommendations First Instalment (2001), paras.33-34.

⁹¹⁶ Cusato (2017), text accompanying footnote 44.

⁹¹⁷ Secretary-General Report 1993, p.7.

⁹¹⁸ See *Prosecutor v. Callixte Mbarushimana*, ICC-01/04-01/10-514, Judgment on the appeal of the Prosecutor against the decision of Pre-Trial Chamber I of 16 December 2011 entitled “Decision on the confirmation of charges”, para 44.

incoherence, as the nature of environmental harm renders it difficult to fit into the existing ICC procedures. However, at origin, the difficulty of adjusting to a dynamic form of harm is less a function of the Prosecution strategy than a function of the need for discrete, time-bound steps along the litigation path in the context of international crimes trials. Indeed, the ICC will have similar difficulties with other, anthropocentric, crimes. Mass displacement of the population, for example, can render uncertain results that fluctuate over time, as people move from shelter to shelter, sometimes crossing borders, and sometimes dying from causes related to the movement. To the extent the ICC procedures are also problematic for these other crimes, it is concerning and should prompt close review of the procedural framework applicable to those crimes. But such concerns should not eclipse the need to address the framework for prosecuting environmental harm and calling for reform where necessary.

(d) Conclusion on investigations and evidence gathering

The preceding analysis shows that the investigating environmental harm would likely face considerable challenges in terms of State cooperation, access to the location of the environmental damage, access to insider witnesses and documentation, and collection and labelling of sufficient material to demonstrate the specific causes of the damage.

While the ICC is imbued with procedures and powers designed to facilitate effective investigations of grave crimes, there are several areas in which the ICC's procedures are not well-suited to the investigation of environmental harm. First, the time-bound steps requiring the Prosecution to commit itself to a certain description of the impugned environmental harm is problematic insofar as it fails to address the dynamic, long-term and multi-factorial nature of environmental harm and may lead to the Prosecution presenting a view of the extent and impact of the environmental harm that is obsolete by the time the trial starts.⁹¹⁹

Second, the presumption in favour of the principle of orality, combined with the multi-faceted nature of environmental harm, may necessitate large volumes of witness testimony to prove the crimes, which may amount to overly lengthy proceedings and render expeditious trials impossible.⁹²⁰

Third, under the cooperation regime, States retain the ultimate ability to frustrate the Court's investigative activities in their territories, particularly when citing national security issues.

⁹¹⁹ See *infra* Chapter III(C)(1)(C).

⁹²⁰ See *infra* Chapter III(C)(1)(a)(ii).

The need for access to territory to investigate environmental harm will be acute. Yet under the current Rome Statute system, such access is far from guaranteed and is likely to be conditional and contingent on the State's interests being met.⁹²¹ In this respect, the Court's lack of an international subpoena power will present an obstacle to obtaining full and frank evidence from witnesses, particularly insider witnesses, who are likely to be critical to the success of environmental cases.⁹²²

Finally, although the rules allow for considerable judicial involvement during the investigative phase of proceedings, the practice to date has not seen a particularly hands-on utilization of these rules by the judiciary. The success of environmental harm cases will be enhanced by greater judicial involvement at the investigative stage, particularly in light of the large volumes of technical and scientific evidence and issues that will arise during investigations and need to be resolved during or prior to trial.⁹²³

The combined impact of these procedural obstacles to the effective investigation of environmental harm is an adjudicative imbalance, whereby the Court's procedures are not properly facilitative of the overarching goals set out in its founding document's preamble. These obstacles to the Court's investigative functions will hinder its ability to balance the trinity of adjudicative functions, namely conducting fair and expeditious proceedings, while seeking to establish the guilt or innocence of the accused, and at the same time respecting their fair trial rights. The analysis now addresses the applicable procedural framework relevant to evidence, particularly expert evidence, in the context of environmental harm cases.

2. Evidentiary challenges in environmental harm cases

A criminal trial revolves around the presentation and testing of evidence. This is as true at the international level as at the national level. In determining the outcome of a trial at the ICC, the judges may base their decision "only on evidence submitted and discussed before [them] at the trial."⁹²⁴ Moreover, in their end-of-trial decision on the accused's responsibility for the charged crimes, the judges must provide a "full and reasoned" statement of their findings on

⁹²¹ See *infra* Chapter III(C)(1)(a)(iv).

⁹²² See *infra* Chapter III(C)(1)(a)(ii).

⁹²³ See *infra* Chapter III(C)(1)(a)(iii).

⁹²⁴ Rome Statute, article 74(2).

the evidence and conclusions.⁹²⁵ Accordingly, the evidentiary framework will play a critical role in determining whether or not environmental harm can be prosecuted before the Court.

The following section analyses how the procedures and rules governing the admission of evidence and presentation of evidence would apply specifically to a case of environmental harm. In doing so, it takes the three paradigmatic forms of environmental harm – military attacks expected to cause excessive environmental harm, toxic dumping, and wildlife exploitation, and, where relevant, explores the types of evidence and means of presenting the evidence relevant to these crimes.

(a) Approach to admission of evidence

As with the *ad hoc* tribunals, the ICC has a relatively flexible approach to the admission of evidence and the practice is generally in favour of admissibility.⁹²⁶ Witness evidence is primarily conveyed through oral testimony before the Judges.⁹²⁷ Under the revised Rules of Procedure applicable at the ICC, there are several means to admit written witness statements into evidence, including, in specific circumstances, when the witness is not made available for cross-examination.⁹²⁸

Documentary evidence has played a highly significant role in trials for atrocity crimes committed by large numbers of actors since their earliest occurrence. At Nuremberg, the Nazis' meticulous documentation of their crimes greatly assisted the work of the Prosecution and the efficiency of the trial.⁹²⁹ Documents continue to be admitted and relied on in large numbers in modern international criminal trials. In ICTY multi-accused cases, the numbers of

⁹²⁵ Rome Statute, article 74(5).

⁹²⁶ See, e.g., *Situation in the Democratic Republic of Congo in the Case of the Prosecutor v. Thomas Lubanga Dyilo*, Decision on the admissibility of four documents (TC), ICC-01/04-01/06, 13 June 2008, para.24. See also *Prosecutor v. Delalić et al.*, Decision on the Motion of the Prosecution for the Admissibility of evidence, Case No. IT-96-21-T, 19 January 1998, para. 16; *Prosecutor v. Rašim Delić*, Case No. IT-04-83-T, Decision Adopting Guidelines on the Admission and Presentation of Evidence and Conduct of Counsel, 24 July 2007, Annex, para.26; International Bar Association, *Evidence Matters in ICC Trials*, August 2016, p.15 ("ICC Trial Chambers have broad latitude and flexibility to rule on evidentiary issues during the trial."). See further Khan et. al. (2010), p.447.

⁹²⁷ ICC Statute, article 69(2); ICTR Statute, Rule 90(A). The corresponding Rule of the ICTY Statute (Rule 90(A)) was removed in 2000 and replaced with Rule 89(F), which jettisons the primacy of oral testimony and reflects the increased reliance of written witness statements in ICTY cases (allowing chambers to "receive the evidence of a witness orally, or, where the interests of justice allow, in written form.")

⁹²⁸ ICC Rules of Procedure and Evidence, Rule 68. See also ICTY Rules of Procedure and Evidence, Rules 92bis, ter, quater, quinquies. See also Cassese and Gaeta (2008), p.372.

⁹²⁹ Telford Taylor, *The Anatomy of the Nuremberg Trials* (Little Brown and Co) (1992), p.57.

documents admitted have run up to around 5,000 in the *Prlic et. al.* Trial,⁹³⁰ while in the ICC trial of *Katanga*, which concerned only one incident, 643 exhibits were admitted.⁹³¹

Unsurprisingly, the specific rules underlying this permissive approach to evidence are broadly framed. Articles 64 and 69 of the Rome Statute provide that, subject to rulings of the Presiding Judge, the parties may present evidence to the Trial Chamber and that the Court shall have the authority to request the submission of all evidence that it considers necessary for the determination of the truth.⁹³² These rules do not circumscribe the types of evidence that may be presented. Article 69(4), is worded flexibly,⁹³³ and provides little in the way of guidance as to the rules governing the presentation, admission and weight of evidence

“The Court may rule on the relevance or admissibility of any evidence, taking into account, *inter alia*, the probative value of the evidence and any prejudice that such evidence may cause to a fair trial or to a fair evaluation of the testimony of a witness, in accordance with the Rules of Procedure and Evidence.”⁹³⁴

The Rules of Procedure and Evidence further clarify that the Judges may “freely” assess the evidence.⁹³⁵

The flexible approach to evidence will be important when addressing environmental harm, particularly in light of the technical and scientific nature of proving the harm, as well as the likelihood that environmental harm will be perpetrated by persons or entities acting in groups, sometimes across multiple jurisdictions, necessitating a greater reliance on “new” forms of evidence, such as call data records and other electronic sources.

In environmental cases, as with other charges, chambers will have to assess the probative value of all evidence on which it relies. The ICC Statute and Rules are potentially ambiguous as to whether evidence could be admitted that does not meet the requirements of relevance

⁹³⁰ *Prosecutor v. Prlić et. al.*, Trial Judgement, Vol.6, Separate and Partially Dissenting Opinion of Judge Antonetti, pp.62-64 (setting out the numbers of exhibits admitted in various ICTY trials).

⁹³¹ For example, 643 exhibits were admitted in the *Katanga* case; *Katanga* article 74 Decision, para.22.

⁹³² Rule 89 of the ICTY and ICTR Rules of Procedure and Evidence is also broadly framed. It allows for the admission of evidence that is relevant and has probative value (meaning that the evidence has sufficient indications of authenticity and reliability that it can be used as a basis for the judges’ findings), so long as the probative value is not substantially outweighed by the prejudicial effect of the evidence.

⁹³³ Stahn and Sluiter (2009), p.507.

⁹³⁴ Rule 63(2) of the ICC Rules of Procedure and Evidence is similarly broad, providing that “a Chamber shall have the authority, in accordance with the discretion described in article 64, paragraph 9, to assess freely all evidence submitted in order to determine its relevance or admissibility in accordance with article 69.”

⁹³⁵ See rule 63(2).

and probative value.⁹³⁶ However, in the *Bemba* proceedings, the ICC Appeals Chamber provided some axiomatic requirements, directing that “when ruling on the admissibility of the evidence, the trial chamber must assess “*inter alia*, its probative value and any prejudice to a fair trial or to a fair evaluation of the testimony of a witness that such evidence might cause”.”⁹³⁷

Nonetheless, more latitude is left to the Trial Chamber as to *when* to make that assessment. In the *Bemba* proceedings, the ICC Appeals Chamber left it open to the relevant chamber to determine admissibility “when evidence is submitted, during the trial, or at the end of the trial”.⁹³⁸ Given the high proportion of scientific evidence likely to be needed for environmental harm prosecutions, and the number of experts to explain the evidence, it will benefit parties if they are aware of which evidence has been admitted on a continuous basis throughout the trial.⁹³⁹ Equally, this approach will reduce the likelihood of disputes over evidentiary standards continuously surfacing through trial. This is a particularly acute concern in relation to environmental harm cases, with the heavy emphasis on detailed technical evidence, as they may see one party repeatedly questioning the methods or sources of the scientific data and requesting access to underlying databases and other materials.⁹⁴⁰

At the same time, this contemporaneous approach is problematic for judges, as they will have to assess the admissibility of proposed evidence somewhat in isolation, and without the benefit of a complete body of connected information against which it can be compared. Moreover, additional information regarding the nature, extent, and cause of the environmental harm may only become available during proceedings and may undermine the reliability of evidence tendered earlier in the trial. Because of this, there is the potential for ill-founded decisions regarding admission of evidence, particularly for evidence submitted early in proceedings. In environmental cases involving scientific issues, it will be difficult to

⁹³⁶ See Schabas (2011), p.312.

⁹³⁷ *Prosecutor v. Jean-Pierre Bemba Gombo*, No. ICC-01/05-01/08 OA 5 OA 6. Judgment on the appeals of Mr Jean-Pierre Bemba Gombo and the Prosecutor against the decision of Trial Chamber III entitled “Decision on the admission into evidence of materials contained in the prosecution’s list of evidence”, 3 May 2011 (“*Bemba* Appeal Decision”), paras.37, 52. See also para.45, noting that pursuant to article 74(2), the material must be “submitted” for admission before the trial chamber can admit it.

⁹³⁸ *Bemba* Appeal Decision, paras.37, 52.

⁹³⁹ Some decisions on admissibility are issued with delay in the contemporaneous model, particularly when complex legal or procedural issues are litigated regarding the evidence in question. However, the majority of the evidence is ruled upon as it is submitted.

⁹⁴⁰ In the Karadžić proceedings at the ICTY, for example, the Defence repeatedly sought access to the complete International Commission for Missing Persons database of DNA samples for Bosnia. This raised complex issues of privacy relating to the DNA samples and the balancing of fair trial rights and the efficiency of proceedings as well as the concerns of third party organizations. See *Prosecutor v. Radovan Karadžić*, Case No.IT-95-13/1, Decision on the Accused’s Motion to exclude DNA Evidence, 16 April 2013.

appreciate the reliability and probative value of complex evidence in the absence of all other related scientific evidence intended to be used during the trial.

(i) Hearsay evidence

Significantly for the prosecution of environmental harm, hearsay evidence is generally admissible.⁹⁴¹ Hearsay evidence has been liberally admitted at the international tribunals and relied on by the judges,⁹⁴² and this trend appears set to continue at the ICC.⁹⁴³ Given the varied types of evidence that will be relevant to proving environmental harm, including business records,⁹⁴⁴ scientific data reports, and other documents, the flexible approach to evidence will facilitate the presentation of a large range of evidence by the parties.

(ii) The admission of documents through witnesses

At the *ad hoc* tribunals and in the early cases before the ICC, the tendency has been for documents to be admitted through witnesses, during the witnesses' testimony.⁹⁴⁵ However, this is a practice rather than a rule, and the jurisprudence of the *ad hoc* tribunals has recognised other procedural mechanisms for the presentation of evidence, such as tendering documentary evidence through bar table motions, as discussed below.⁹⁴⁶ *Ex post facto* reports or documents would be relevant to investigations and prosecutions for attacks causing excessive harm to the environment during armed conflict (for example crater impact reports made in the immediate aftermath of a shelling attack), toxic dumping (for example reports by rapid response health workers as to the medical problems caused by the toxic substances), and

⁹⁴¹ See, e.g., *Lubanga* Article 74 Decision, para.1036 relying on the partially hearsay evidence of P-0116. See also *Prosecutor v. Milan Lukić & Sredoje Lukić*, Case No. IT-98-32/1-A, Appeal Judgement, 4 December 2012, para.303; *Prosecutor v. Tihomir Blaškić*, Case No. IT-95-14-A, Appeal Judgement, 29 July 2004, para.656, fn.1374; *Prosecutor v. Duško Tadić*, Case No.IT-94-1, Decision on the Defence Motion on Hearsay, 5 August 1996.

⁹⁴² See, e.g., *Prosecutor v. Zlatko Aleksovski*, Case No. IT-95-14/1-AR73, Decision on Prosecutor's Appeal on Admissibility of Evidence, 16 February 1999, para. 15.

⁹⁴³ Piragoff (2001), p.351.

⁹⁴⁴ Access to records and databases will also be a significant determinant of the quality of an investigation at the ICC for environmental harm. Domestic enforcement agencies in the USA, for example, make use of sophisticated computer programs to monitor data relevant to potential breaches of environmental regulations, such as toxic release data, and facility compliance data. These agencies often have access to the computer databases of the entity being investigated and so can monitor its own data. Obtaining similar access to business and organizational records will have a major impact on the feasibility of proceedings before the ICC for environmental harm; Riesel (2014), section 1.03[4], 1-10.

⁹⁴⁵ Khan et. al. (2010), p.480-481.

⁹⁴⁶ See *infra* Chapter III(C)(2)(a)(iii).

wildlife exploitation (such as reports about the fluctuating numbers of a particular endangered species).⁹⁴⁷

(iii) Bar table motions

Litigation for environmental harm would likely feature a large amount of documentation. Bar table motions in this context could be a valuable means of ensuring the efficiency of proceedings by allowing parties to focus valuable court time on the most important documents and issues, tendering exemplars of each type of document, and then tendering the additional similar documents covering the full range of charges in written form. The guidelines of several trial chambers specify that the fact that the author of a document is not present to testify does not preclude the admission of the document.⁹⁴⁸ Bar table motions have been utilized in the large majority of international criminal cases, in many instances serving as a residual means of tendering relevant and probative documents that were not used with witnesses. In environmental prosecutions, bar table motions would be important tools for the parties, as evidence such as lengthy, highly-technical, reports of scientific bodies would likely make up a considerable portion of the parties' evidence lists. The corollary is a heightened risk of materials being admitted in bulk without expert guidance as to the specific details and methodology of the reports in question. Chambers would have to guard against the misuse of the bar table procedure, such as its use as a form of Trojan horse to sneak documents onto the record on issues that were not canvassed during the testimonial part of that party's case, without providing sufficient opportunity for the opposing party to respond.⁹⁴⁹

⁹⁴⁷ In this respect, the practice of the *ad hoc* tribunals provides some guidance. Such reports and statements are regularly admitted before the ICTY under the general evidential provision (Rule 89) rather than the *lex specialis* of Rule 92bis, *ter, quater, or quinquies*. See e.g., *Prosecutor v. Mladen Naletilić & Vinko Martinović*, Case No. IT-98-34-A, Appeal Judgement, 3 May 2006, para.223; Khan et. al. (2010), p.404. At the ICTR, such non-contemporaneous reports have been sometimes considered as falling under Rule 92bis, but have also been admitted under Rule 89. Khan et. al. (2010), p.403, 406 citing *Prosecutor v. Nahimana*, Case No. ICTR-99-52-T Decision on the Nahimana Defence's Motion to Admit into Evidence Certain Materials and the Prosecution Objections thereto, 5 June 2003; *Prosecutor v. Bagosora et. al.*, Judgement, ICTR-98-41-T, 18 December 2008, para.1963. The conventional approach is that statements are defined as meaning records of the words of a person recorded non-contemporaneously and for the purpose of legal proceedings (typically with the involvement of law enforcement or similar authorities). See, e.g., *Prosecutor v. Stanislav Galić*, Case No.IT-98-29-AR73.2, Decision on Interlocutory Appeal Concerning Rule 92bis(C), 7 June 2002, paras.28-31.

⁹⁴⁸ See, e.g., *Prosecutor v. Goran Hadžić*, Case No. IT-04-75-T, Order on Guidelines for Procedure for Conduct of Trial, 4 October 2012, Annex, para.5 ("There is no rule prohibiting the admission into evidence of documents merely because their alleged source was not called to testify.")

⁹⁴⁹ These are written motions that are typically submitted near the end of a party's case as a form of back-stop mechanism to tender documents that were not able to be used with a specific witness. Chambers tend to

(iv) Exclusionary rules concerning evidence

To balance the broadly framed permissive rules of evidence, there are exclusionary rules that can be invoked to limit the introduction of evidence. For example, at the ICC if a State considers that the disclosure of its documents would prejudice its national security interests, it may intervene before the ICC to prevent that disclosure, as discussed above.⁹⁵⁰ A failure of the Government to provide the requested information allows the Court to draw an adverse inference against it, as well as the benefiting party or both parties.⁹⁵¹

Evidence obtained through dubious methods or evidence of such a nature as to bring the integrity of proceedings into dispute is not admissible before the international tribunals:⁹⁵²

Article 69 (7) renders evidence that is obtained in violation of the Statute or internationally recognised human rights inadmissible if (1) the violation casts substantial doubt on the reliability of the evidence or (2) its admission would be antithetical to or would seriously damage the integrity of the proceedings...⁹⁵³

The exclusionary rules would be important for environmental cases, as there are many domestic principles that limit the way in which the authorities can collect and use evidence from sites such as factories and business records. Searches carried out on business premises would have to be conducted carefully and in accordance with the appropriate procedures to ensure that any evidence obtained could be used in subsequent proceedings before the Court. If samples were obtained without full adherence to domestic law and subsequently provided to the Court, the Judges may have to determine whether the admission of such materials would be antithetical to or seriously undermine the integrity of the proceedings. There is no direct precedent to guide this assessment, but the proceedings against Jean-Pierre Bemba and several members of his defence team for interference with the administration of justice indicate that minor procedural deviations from national law will not amount to grounds to

encourage parties to minimize their reliance on bar table motions. Trial Chambers have indicated that they do not want to be flooded with large amounts of documentary evidence which has not been placed in context and authenticated by accompanying witness testimony. See, e.g., *Prosecutor v. Goran Hadžić*, Case No. IT-04-75-T, Decision on Prosecution Bar Table Motion, 28 November 2013, para.3.

⁹⁵⁰ Rome Statute, article 72.

⁹⁵¹ Rome Statute, article 72(a)(iii).

⁹⁵² Rome Statute, article 69(7); ICTY and ICTR Statutes, Rule 95; SCSL Statute, Rule 95.

⁹⁵³ *Prosecutor v. Jean-Pierre Bemba Gombo*, No. ICC-01/05-01/08 OA 5 OA 6. Judgment on the appeals of Mr Jean-Pierre Bemba Gombo and the Prosecutor against the decision of Trial Chamber III entitled “Decision on the admission into evidence of materials contained in the prosecution's list of evidence”, 3 May 2011, para.52.

exclude evidence under article 69(7).⁹⁵⁴ It is important in this respect that the Court does not act as a review body for domestic law, and will not rule on the application of a State's national law when determining issues concerning the admissibility of evidence.⁹⁵⁵

(b) Standards and burdens of proof applicable to environmental harm cases

In the context of a trial for environmental harm, the standards of proof of guilt beyond reasonable doubt,⁹⁵⁶ which falls on the Prosecution,⁹⁵⁷ will be exacting. The scientific and technical type of evidence required to prove environmental harm, and the multi-factorial and dynamic nature of the environmental harm itself do not lend themselves easily to proof beyond reasonable doubt.⁹⁵⁸ As set out above, issues like the longitudinal extent of the harm and causation will be difficult to establish beyond reasonable doubt.⁹⁵⁹

The one provision in the Rome Statute that mentions the environment demonstrates these difficulties: article 8(2)(b)(iv) requires evidence demonstrating beyond reasonable doubt that environmental damage was anticipated that was widespread, long-term and severe, and also that it was the attack of the accused that caused the damage.⁹⁶⁰ As discussed previously, the definitions of these terms remain unsettled, meaning that a Prosecution team pursuing the charges would have to presume the most demanding definition of the crime and ensure that sufficient evidence was obtained. Article 8(2)(b)(iv) also contains the exacting proportionality analysis whereby it must be shown that the commander launched the attack knowing that it would be clearly excessive in relation to the concrete and direct overall military advantage anticipated.⁹⁶¹

In this respect, environmental harm brings into question the efficacy of the beyond reasonable doubt standard for environmental harm featuring complex scientific and technical issues of a dynamic nature. In turn, given the importance of the beyond reasonable doubt standard for the

⁹⁵⁴ *Prosecutor v. Jean-Pierre Bemba Gombo et. al.*, ICC-01/05-01/13, Decision on Requests to Exclude Western Union Documents and other Evidence Pursuant to Article 69(7), 29 April 2016, para.34.

⁹⁵⁵ Rome Statute, article 69(8).

⁹⁵⁶ See, e.g., Rome Statute, article 66(3). See also ICTY Rules of Procedure and Evidence, Rule 87 ("A finding of guilt may be reached only when a majority of the Trial Chamber is satisfied that guilt has been proved beyond reasonable doubt.").

⁹⁵⁷ See, e.g., Rome Statute, article 66(2). See also *Prosecutor v. Milan Martić*, Case No. IT-95-11-A, Appeal Judgement, 8 October 2008, para. 55; *Prosecutor v. André Ntagerura, Emmanuel Bagambiki & Samuel Imanishimwe*, Case No. ICTR-99-46-A, Appeal Judgement, 7 July 2006, paras. 174–175.

⁹⁵⁸ Cusato (2017), text accompanying footnote 44.

⁹⁵⁹ See, e.g., Cusato (2017), text accompanying footnote 43.

⁹⁶⁰ See Rome Statute, article 8(2)(b)(iv) and Elements of Crimes for article 8(2)(b)(iv).

⁹⁶¹ Elements of Crimes, fn.36. See also Weinstein (2005), pp.698, 708, fn.95.

fairness of proceedings and the rights of the accused, the procedural requirements at the ICC indicate potential adjudicative incoherence when applied to complex cases of environmental harm.

(i) The applicability of the precautionary principle

A question arises as to the impact of the precautionary principle in the context of a trial for environmental harm before the ICC. The substance of the principle is expressed *inter alia* in the *Rio Declaration*, at principle 15, which states that in order to protect the environment,

"the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

The ICRC has explained the nature of the precautionary principle under international law as follows: "an emerging, but generally recognized principle of international law [whose object it is] to anticipate and prevent damage to the environment and to ensure that, where there are threats of serious or irreversible damage, lack of scientific certainty shall not be used as a reason to postpone any measures to prevent such damage."⁹⁶²

Under article 21 of the Rome Statute, the precautionary principle could constitute an applicable source of law if it were established as customary international law or else incorporated into an applicable international treaty.⁹⁶³ However, the status of the precautionary principle under customary international law is disputed. Whereas it has been recognised as part of customary international law before the International Tribunal on the Law of the Sea,⁹⁶⁴ it is yet to be confirmed as part of customary international law by the ICJ, and the ICRC called it an emerging principle in its study of customary international law.⁹⁶⁵ In the *Pulp Mills* case, the parties specifically addressing it at length, but the ICJ declined to use the

⁹⁶² ICRC Study, Commentary to Rule 44. See also Secretary-General Report 1993, p.17.

⁹⁶³ Rome Statute, article 21(1)(b).

⁹⁶⁴ ICRC Study, Rule 43; *Southern Bluefin Tuna Cases*, Provisional Measures 2, Int'l Trib. L. of the Sea, Order of 27 August 1999; See *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area*: Advisory Opinion, 132-33, Int'l Trib. L. of the Sea (Advisory Opinion of 1 February 2011).

⁹⁶⁵ ICRC Study, Commentary to Rule 44. See also Secretary-General Report 1993, p.17.

principle in any concerted manner.⁹⁶⁶ Nonetheless, the ICJ left open the space to later re-engage the precautionary principle, stating “a precautionary approach may be relevant in the interpretation and application of the provisions of the Statute”.⁹⁶⁷

Failing customary international law status, the precautionary principle arguably would be applicable if it constituted a general principle of law.⁹⁶⁸ The precautionary principle is explicitly referred to in domestic statutes addressing crimes against the environment.⁹⁶⁹ UNEP has also stated that principles such as the precautionary principle can be invoked to assist the prosecution of environmental harm such as the illegal transboundary movement of hazardous waste.⁹⁷⁰

If applied in cases of international criminal law, the precautionary principle would potentially have a significant impact. It would apply to prosecutions under international criminal law, which are clearly measures taken to prevent or deter environmental harm. Because it holds that a lack of full scientific certainty as to the nature of the environmental damage should not hinder or undermine these measures, those advocating heightened protections of the environment would argue that the precautionary principle justifies using estimates and predictions in place of precise and comprehensive measurements of environmental harm.

For example, in relation to the requirement of showing long-term harm for the purposes of article 8(2)(b)(iv) of the Rome Statute, advocates of this approach may argue that an interpretation in line with the precautionary principle could be taken to allow for the use of prospective estimates instead of waiting and collecting samples over several years in order to establish that actual harm had occurred.⁹⁷¹ They would argue that incorporating the precautionary principle into the interpretation of international humanitarian law would adhere to the ICJ’s guidance that “an international instrument has to be interpreted and applied within

⁹⁶⁶ Daniel Kazhdan, “Precautionary Pulp: Pulp Mills and the Evolving Dispute between International Tribunals over the Reach of the Precautionary Principle”, *Ecology Law Quarterly*, Vol. 38, Issue 2, March 2011, p.545.

⁹⁶⁷ *Pulp Mills on the River Uruguay (Arg. v. Uru.)*, Judgment, para.228 (20 April 2010), available at <http://www.icj-cij.org/docket/files/135/15877.pdf>, para.257.

⁹⁶⁸ Rome Statute, article 21(1)(b).

⁹⁶⁹ Environment Protection Act of Victoria, Australia, 1970 - Section 1C(1) (“If there are threats of serious or irreversible [environmental](#) damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent [environmental](#) degradation.”) Available at http://www.austlii.edu.au/au/legis/vic/consol_act/epa1970284/s4.html (last checked 29 May 2015).

⁹⁷⁰ UNEP Basel Convention Guide, para.63.

⁹⁷¹ Note that it is unclear that article 8(2)(b)(iv) requires the demonstration of actual environmental harm, as opposed to the anticipation of environmental harm matching the requirements of long-term, widespread, and severe harm.

the framework of the entire legal system prevailing at the time of the interpretation”.⁹⁷² It would also potentially fit with the strange framing of article 8(2)(b)(iv), which literally refers to anticipated environmental harm that “will” ensue, rather than actual environmental harm *per se*.

In this respect, the precautionary principle could potentially also impact on the assessment of the *mens rea* of an accused prosecuted under article 8(2)(b)(iv). In showing that the accused was aware that the harm to the natural environment would be “clearly excessive in relation to the concrete and direct overall military advantage anticipated”, the precautionary principle would justify not having to demonstrate that the accused knew with scientific precision of the extent of the environmental damage but merely that there was a “threat of serious or irreversible damage.” If this approach applied, an accused would be unlikely to have success in arguing that he had to predict the extent of the damage with scientific certainty. However, the explicit terms of article 8(2)(b)(iv), specifically showing that the accused knew that the environmental harm “will” ensue, clashes with mere knowledge of a risk of such harm. Moreover, the term “clearly” in article 8(2)(b)(iv) indicates that any doubt as to the extent of the damage would undermine the requirement of showing the accused’s awareness that it was “clearly” excessive.

(c) Order of presentation of the case

Under the governing rules of procedure and evidence of the ICC there is considerable scope for variation of the manner in which the evidence is presented. Trial Chambers may establish whichever order for the presentation is considered to be in the interests of justice.⁹⁷³ Although in practice the international courts have almost always adhered to the traditional common law sequence of Prosecution evidence followed by Defence evidence with any Chambers’ evidence brought after the Parties, there are valid reasons that this order could be varied for the purposes of prosecuting environmental harm before the ICC.

The Rome Statute allows for a flexible approach to the order of presentation of evidence.⁹⁷⁴ Under Article 64(8)(b) and Rule 140, the Trial Chamber may give directions for the conduct of proceedings, but no presumptive order of proceedings is established. This is a reflection of

⁹⁷² International Court of Justice, *Legal Consequences for States of the Continued Presence of South Africa in Namibia (South West Africa) notwithstanding Security Council Resolution 276 (1970)*, Advisory Opinion of 21 June 1971, I.C.J. Reports 1971, p.16, para.53.

⁹⁷³ ICC Statute, article 64(8)(b) and rule 140. See also Stahn and Sluiter (2009), pp.506-507.

⁹⁷⁴ Cryer et. al. (2010), p.469.

the influence of delegates from civil law systems involved in the Rome Statute negotiations. Civil law trials are founded on a dossier of the relevant information that is provided to all parties prior to the commencement of trial. Because of this, they are not as strictly bound as common law systems to the traditional order of prosecution followed by defence with supplementary evidence adduced by the Judges.⁹⁷⁵ The ICTY Rules reflect a presumption in favour of the common law order with the Prosecution presenting its case before the Defence is given the opportunity to present evidence in its case. The order is an important reinforcer of the fair trial rights of the accused. It provides the Defence with the opportunity to view the core of the case against its client before it determines whether to call evidence in response.⁹⁷⁶

As set out above, cases of environmental harm are likely to focus heavily on scientific data.⁹⁷⁷ For cases concerning complex scientific data, some flexibility in the order of presentation of evidence may be advisable. For example, if a case had two major components, one focusing on damage to an environmental feature, such as a waterway, and one focusing on damage to a forest, it may benefit the Chamber to hear the witnesses, including experts, and receive the other evidence concerning the first component from both parties before subsequently moving to the second component.⁹⁷⁸ Cases involving charges of environmental harm would be particularly amenable to partitioning off segments of the evidence, such as expert evidence or scientific focussed areas, in order to address the prosecution and defence evidence and submissions on that segment before moving to the next one. For military attacks resulting in excessive harm to the environment, two areas that could potentially be partitioned off would be the technical and expert evidence concerning the nature of the environmental damage, and the military and ballistic evidence concerning the nature of the military strike itself. Similarly, toxic dumping may benefit from partitioning segments of the case. The technical and expert evidence concerning the nature of the chemicals dumped and their impact on the environment, as well as the evidence concerning the structure of the corporations or organizations that conducted the dumping would potentially be suitable for partitioning.

A possible means of avoiding unduly lengthy proceedings would be to litigate the most demanding legal element or elements based on the evidence of both Parties at the outset of

⁹⁷⁵ Cryer et. al. (2010), p.470.

⁹⁷⁶ Khan et. al. (2010), p.423.

⁹⁷⁷ Sands (2008), p.4.

⁹⁷⁸ For a similar suggestion of dividing the case into “topics” or “thematic blocks”, see Stahn and Sluiter (2009), p.506.

trial proceedings.⁹⁷⁹ Only if that element were met would the trial proceedings continue. A *voir dire* could be held to assess whether there was a reasonable basis on the evidence as admitted at that point to support the element. If the element/s were not met, then the charges would be unsustainable. If that element/s were met, the accused would be encouraged in many cases to plead guilty. If neither of these outcomes were taken up, the result would simply be an ongoing trial of approximately the same length as originally anticipated. There is flexibility in the Rules of the ICC to allow for such an approach. Given that proof of factors such as long-term environmental damage may require several years, the accelerated adjudication suggested herein would help to prevent unmeritorious cases remaining *sub judice* and clogging up the Court's docket.

(d) Proving key elements of environmental harm

Evidence may potentially include anything that provides information about the incident being investigated.⁹⁸⁰ A variety of evidential sources will typically be necessary to prove charges of environmental harm, foremost amongst which will be scientific and expert evidence. The categories of evidence that could be introduced in an environmental harm case would be varied. Evidential materials could include testimonial evidence from witnesses (evidence in international trials is typically introduced through witnesses during their testimony); written materials including orders, log books, communiqués, press statements, meeting minutes, newspaper articles, books, reports, and all manner of other recorded documents; videos; photographs; maps; graphs; diagrams; satellite images; audio recordings; real evidence;⁹⁸¹ crime-scene analysis or physical samples (typically tested by experts and explained in their reports);⁹⁸² computer databases, and various other recordings.⁹⁸³ For the purposes of proving atrocity crimes, a broad net should be cast to pick up all relevant information.⁹⁸⁴

⁹⁷⁹ One of the fair trial rights of an accused is to be tried without undue delay; Rome Statute, article 67(1)(c). From the range of evidence discussed above, it is clear that, in the absence of a confession, any prosecution for environmental harm would require a considerable amount of time to proceed through the trial and then additional time for the appeal. Trials for established crimes such as murder, deportation or plunder take years to complete before the international courts. Adding in additional layers of evidence to address the elements of environmental crimes such as that contained in article 8(2)(b)(iv) of the Rome Statute would lengthen proceedings even further. For example, the Trail Smelter arbitration, which concerned emissions from a Canadian factory that resulted in environmental harm suffered across the border in the USA, dragged on for 13 years; *Trail Smelter Case* (1941).

⁹⁸⁰ See Groome (2011), p.40 ("Evidence is anything that can provide information about the incident being investigated. It may include: physical objects; the investigator's observations; the testimony of witnesses and suspects; documents; and scientific analysis.")

⁹⁸¹ "Real evidence" is a term of art referring to physical evidence such as handcuffs, murder weapons, and other objects that are presented in their original state.

⁹⁸² Examples of on-site reports that have been admitted into evidence at the ICTY can be seen in ballistics and impact reports submitted as evidence in the cases concerning the siege of Sarajevo; see, e.g., *Prosecutor v.*

Instead of attempting to comprehensively analyse every potential type of evidence that may be used to proving environmental harm, the following section examines the primary evidentiary areas that will need to be addressed. Examples from prior cases at the ICC and other international tribunals are used to instantiate the particular benefits and concerns of certain types of evidence. Because there have been no trials focusing on environmental harm under international criminal law, much of the following analysis draws insights by analogizing with anthropocentric cases, or by referring to relevant practice of other jurisdictions, such as international human rights courts, and occasionally domestic jurisdictions.

(i) The nature of the wrongful act

Finding appropriate evidence to prove the nature of the harmful act is a critical focus of investigations and prosecutions under international law. In the context of charges of excessive damage to the natural environment through military attacks,⁹⁸⁵ the relevant orders and artillery log books would likely be critical to establishing when the attack was launched, what munitions were used, and which factors were taken into account in determining which targets to strike.

Harm to the environment due to the impact of war tactics is a dynamic matter, implicating many variables.⁹⁸⁶ It can be difficult to accurately measure the extent of environmental damage and it can be even more difficult to prove the cause of the damage (or the relative significance of the causative factors if they are multiple).⁹⁸⁷ Various factors can cumulatively impact on the environment, including man-made objects, such as missiles or chemicals, weather patterns, such as tornadoes or floods, and longer-term atmospheric changes, including climate change. Establishing the impact of a single causative factor can be elusive due to the gap in time and distance that may occur between the causative event and the resulting

Dragomir Milošević, Case No. IT-98-29/1-T, Judgement, 12 December 2007, paras.682, 719. For an example of the admission of an on-site report by a local investigative judge in a central Bosnia case of crimes by Croats against Bosniaks see *Prosecutor v. Kordić and Čerkez*, Case No. IT-95-14/2-T, Decision on Prosecution Application to Admit the Tulica Report and Dossier into Evidence, 29 July 1999, paras.29-32.

⁹⁸³ See, e.g., Khan et. al. (2010), p.487.

⁹⁸⁴ See Stahn (2015), p.815, fn.76 (“A responsible investigator will therefore seek to document or collect all relevant evidence as soon as it is encountered, providing that it is practically feasible for them to do so and will not give rise to an unacceptable risk for the information provider.”).

⁹⁸⁵ This is a paraphrased reference to the crime contained in article 8(2)(b)(iv) of the Rome Statute. For an analysis of the elements of that crime, see *infra* Chapter II.

⁹⁸⁶ See, e.g., Final Report on NATO (2000), para. 17 (finding that the environmental damage to sites in Serbia could not unambiguously be attributed to NATO).

⁹⁸⁷ See McLaughlin (2000), p.396. See also UNCC Recommendations First Instalment (2001), paras.33-34.

environmental harm as well as the intervention of other intervening factors that may augment the resulting damage.⁹⁸⁸

In the context of charges of improper disposal or dealing of hazardous substances,⁹⁸⁹ the annexes to the Basel Convention could be cited to show that the chemicals in question were listed as a substance that should not be improperly disposed.⁹⁹⁰ Expert evidence, incorporating samples of contaminated soil or other matter, could then be used to prove that the chemicals were indeed regulated ones. To prove the dumping itself, it would likely be necessary to obtain shipping logs or other records of those transferring the chemicals, as well tests to show the nature of the chemicals.⁹⁹¹ Because this crime cannot currently be directly prosecuted at the ICC and would most easily be prosecuted as anthropocentric crime such as the crime against humanity of other inhumane acts,⁹⁹² it would be necessary to gather and adduce evidence showing that the traffic or improper disposal of hazardous substances led to serious physical or mental harm to victims. The primary source of such evidence would be statements from the victims who suffered the harm. But hospital records, which are frequently used as evidence in international cases, would also assist to connect the causative act with the resulting harm.

Reports from respected international bodies could also form a valuable source of information, and potentially evidence, for international proceedings in relation to the nature and extent of the harm to the environment. For example, in Ogoniland, Nigeria, the Government, together with UNEP and other partners, prepared an environmental impact assessment focusing on the effects of the oil industry's activities in the region. examined the environmental impact of oil industry operations in the area since the late 1950s, which demonstrated extensive oil contamination in Ogoniland, which was impacting the environment and human health, particularly through contaminated drinking water and carcinogens.⁹⁹³

⁹⁸⁸ UNCC Recommendations First Instalment (2001), paras.33-34 ("This may make it difficult in many cases to distinguish between damage attributable to Iraq's invasion and occupation of Kuwait and damage that may be due either to factors unrelated to Iraq's invasion and occupation or only partly attributable to Iraq's invasion and occupation.").

⁹⁸⁹ African Union Specialized Technical Committee on Justice and Legal Affairs, *Draft Protocol on Amendments to the Protocol on the Statute of the African Court of Justice and Human Rights*, Doc.STC/Legal/Min/7(I) Rev. 1, 15 May 2014, p.28, Article 28L.

⁹⁹⁰ See *infra* Chapter I(C)(1) (discussion of sources of law).

⁹⁹¹ See, e.g., Interpol Investigation Guide (2014).

⁹⁹² See *infra* Chapter II(C)(2)(b) (discussion of crime against humanity of other inhumane acts).

⁹⁹³ UNEP *Environmental Assessment of Ogoniland* (2011).

However, concerns have been raised as to the reliability of *ex post facto* reports from organisations, such as human rights NGOs. All reports are not equal however, and the judiciary has on occasion indicated concerns with NGO reports and press articles, particularly those incorporating or based on anonymous hearsay information,⁹⁹⁴ as a means of proving charges to the requisite standard.⁹⁹⁵ In the *Mbarushimana* confirmation proceedings, the pre-trial chamber declined to confirm the charges and noted concern at the Prosecution's reliance on reports from NGOs and international organizations, primarily because these sources tend to contain hearsay evidence rather than constituting the direct evidence of witnesses to the events in question.⁹⁹⁶ Similarly, in the Kenya confirmation decisions, the pre-trial chamber expressed concerns about relying on "indirect evidence", which it defined as "hearsay evidence, reports of international and non-governmental organisations (NGOs) as well as reports from national agencies, domestic intelligence services and the media",⁹⁹⁷ and in the first confirmation decision in the Gbagbo case, the Pre-Trial Chamber expressed concerns about the reliance on reports of NGOs and international organizations.⁹⁹⁸

Wildlife exploitation could conceivably be prosecuted as the crime against humanity of other inhumane acts under the current iteration of the Rome Statute.⁹⁹⁹ As a starting point, the CITES annexes could be relied on to establish *prima facie* that the relevant species is endangered. In this manner, CITES would be relied on as the *lex specialis* concerning the status of various species as endangered or otherwise. To establish the crime against humanity of inhumane acts, it is necessary to show that the perpetrator inflicted great suffering, or serious injury to body or to mental or physical health.¹⁰⁰⁰ In respect of exploited species, this would mean not just proving the improper dealing with the species itself, but also linking the trade or exploitation to the great suffering or serious injury on the part of victims. Obtaining evidence of these elements would be highly context-specific and would likely require expert

⁹⁹⁴ *Prosecutor v. Callixte Mbarushimana*, ICC-01/04-01/10-465-Red, Decision on the Confirmation of Charges, 16 December 2011 ("*Mbarushimana* confirmation decision"), para.78.

⁹⁹⁵ See generally Niamh Hayes, "Investigating and Prosecuting Sexual Violence at the ICC", in Stahn (2015), p.822.

⁹⁹⁶ See *Mbarushimana* confirmation decision, para.78; *Prosecutor v. Callixte Mbarushimana*, Confirmation of Charges Hearing Transcript, ICC-01/04-01/10-T-9-ENG CT WT, PTC I, ICC, 21 September 2011, 2–4.

⁹⁹⁷ *Prosecutor v. Ruto, Kosgey and Sang*, Decision on the Confirmation of Charges Pursuant to Art 61(7)(a) and (b) of the Rome Statute, Situation in the Republic of Kenya, ICC-01/09-01/11-373, PTC II, ICC, 23 January 2012; *Prosecutor v. Muthaura, Kenyatta and Ali*, Decision on the Confirmation of Charges Pursuant to Art 61(7)(a) and (b) of the Rome Statute, Situation in the Republic of Kenya, ICC-01/09-02/11-382-Red, PTC II, ICC, 23 January 2012.

⁹⁹⁸ See *Prosecutor v. Laurent Gbagbo*, ICC-02/11-01/15, Decision adjourning the hearing on the confirmation of charges pursuant to article 61(7)(c)(i) of the Rome Statute, 3 June 2013, para.35.

⁹⁹⁹ See *infra* Chapter II(C)(2)(b) (discussion of crime against humanity of other inhumane acts).

¹⁰⁰⁰ Elements of Crimes, p.12, article 7(1)(k).

evidence to explain the significance of the relevant fauna or flora to the victim community. Because of this, a combination of witness statements from affected victims, reports and testimony of expert witnesses detailing the crimes, and evidence from documents or persons with knowledge of the perpetrator(s) would be necessary to prove the wildlife exploitation.

In conjunction with evidence from witnesses, documents, and other sources, materials such as satellite imagery could be submitted through expert witnesses or possibly even through the bar table,¹⁰⁰¹ to demonstrate the extent of the harm. For example, under the auspices of the UNCC, Iran successfully sought compensation for a study that used satellite imagery analysis to track the transport of airborne pollutants from the oil fires in Kuwait and the spilled oil in the Persian Gulf that resulted from Iraq's invasion and occupation of Kuwait.¹⁰⁰²

Media reports have been used frequently in international criminal proceedings, but have also come under criticism, particularly when used as a substitute for evidence from direct sources such as witnesses to the crimes.¹⁰⁰³ Large-scale attacks on the environment would typically generate considerable media interest. In theory, media articles could be used to prove elements of the crime, particularly the occurrence of widespread or severe environmental harm. Newspaper articles are in principle treated like other documents and tested according to their reliability and probative value. Newspaper articles are not typically treated as witness statements in international criminal proceedings, despite arguments to this effect.¹⁰⁰⁴ In the context of the prosecution of environmental damage, newspaper reports could be used to demonstrate the occurrence of the attack, the notoriety of the attack, and any related information that was publicly reported. Due caution would have to be paid to information that went to core issues concerning the responsibility of the accused, such as his actions or statements concerning the attack.¹⁰⁰⁵

However, triers of fact are typically more reluctant to admit newspaper articles because of the impression that such articles can prove unreliable. In the *Gbagbo* proceedings, the pre-trial chamber warned that “[e]ven though NGO reports and press articles may be a useful introduction to the historical context of a conflict situation, they do not usually constitute a valid substitute for the type of evidence that is required to meet the evidentiary threshold for

¹⁰⁰¹ See *infra* Chapter III(C)(2)(a)(iii) and III(C)(2)(e).

¹⁰⁰² UNCC Recommendations First Instalment (2001), para.62.

¹⁰⁰³ See Niamh Hayes, “Investigating and Prosecuting Sexual Violence at the ICC”, in Stahn (2015), p.823.

¹⁰⁰⁴ *Prosecutor v. Radoslav Brđanin*, Case No. IT-99-36-T, Judgement, 1 September 2004, para.33, *Prosecutor v. Radoslav Brđanin*, Case No. IT-99-36-A, Appeals Judgement, 3 April 2007, para.220-224.

¹⁰⁰⁵ See Khan et. al. (2010), p.409 (listing dangers inherent in relying on media reports).

the confirmation of charges.”¹⁰⁰⁶ At the African Court of Human and Peoples’ Rights, the Rules of the Court provide that applications to the court should “not be based exclusively on news disseminated through the mass media”.¹⁰⁰⁷ In particular, newspaper articles using highly emotive or inflammatory language will be less likely to be admitted into evidence because of the prejudicial nature of such language that is not subject to cross-examination.¹⁰⁰⁸

(ii) The extent of the damage resulting from the wrongful act

In the context of prosecuting environmental harm, it will be important to obtain and present evidence that distinguishes between damage caused by unnatural means and naturally occurring damage. Whereas a perpetrator could be held responsible for an attack causing grave environmental harm (presuming the other elements of the relevant provision were fulfilled), s/he should not be held responsible for events that s/he has not contributed to in any way.¹⁰⁰⁹ Accordingly, causation is a critical consideration under international criminal law, including at the ICC.¹⁰¹⁰

Issues of causation will be particularly difficult to address in the context of environmental harm.¹⁰¹¹ To the extent that causation is difficult to prove for regularly charged crimes such as murder, it is likely to be all the more complex when proving serious environmental harm. Many factors may affect the nature¹⁰¹² and extent of the harm deriving from an accused’s conduct, including the weather itself. For example, an accused member of ISIS charged with the burning of oil installations in 2016 would be liable for the damage occurring from those acts of arson (presuming the elements of a mode of liability could be established), but would

¹⁰⁰⁶ See *Prosecutor v. Laurent Gbagbo*, ICC-02/11-01/15, Decision adjourning the hearing on the confirmation of charges pursuant to article 61(7)(c)(i) of the Rome Statute, 3 June 2013, para.35.

¹⁰⁰⁷ African Court of Human and Peoples’ Rights, Rules of Court, Rule 40(4).

¹⁰⁰⁸ Khan et. al. (2010), p.614 citing *Prosecutor v. Kvocka et. al.*, Decision on Zoran Žigić’s Motion for Rescinding Confidentiality of Schedules Attached to the Indictment Decision on Exhibits, IT-98-30/1-T (19 July 2001).

¹⁰⁰⁹ The framing of the test for superior responsibility under article 28 of the Rome Statute raises complex questions surrounding causation, which are currently *sub judice* on appeal and are not addressed in this analysis. See generally *Bemba* Article 74 Decision.

¹⁰¹⁰ For example, the word “caused” in some iteration comes up repeatedly in the elements of crimes of the ICC. Note that the occurrence of the crime is a different question from the use of modes of liability to establish who is responsible for the crime. See G Werle, *Principles of International Criminal Law*, (2nd Ed. 2009), (“Werle (2009)”), p.144-145. For modes of liability, the level of contribution varies and it is not clear that a causal relationship between the accused’s acts and the perpetration of the crime is strictly required; Stahn (2015), p.590. For the crime of murder, it must be shown that a perpetrator “caused” the death of one or more persons; *Katanga* article 74 Decision, para.767.

¹⁰¹¹ The requirement of providing “clear and convincing evidence” of harm set down in the Trail Smelter arbitration led to difficulties for Australia and New Zealand when pursuing their claim against France before the ICJ due to the difficulties of proving environmental effects in Australia and New Zealand caused by atmospheric test carried out by France in Mururoa atoll thousands of kilometres away; Stephens (2009), p.134-135.

¹⁰¹² Cooper et. al. (2009), p.2.

not be responsible for damage caused by pre-existing improper leaks or other environmental harm from the oil installations.¹⁰¹³ Similarly, if the attack had the effect of releasing dangerous elements such as chemicals into the environment, and that release was foreseeable, the perpetrator should be held responsible for the resulting damage.¹⁰¹⁴

The critical importance of obtaining evidence of the extent of the environmental damage is highlighted by the Report for the ICTY Prosecutor drafted by the Committee Established to Review the 1999 NATO Bombing Campaign in Former Yugoslavia.¹⁰¹⁵ It noted that ‘[t]he OTP has been hampered in its assessment of the extent of environmental damage in Kosovo by a lack of alternative and corroborated sources regarding the extent of environmental contamination caused by the NATO bombing campaign’.¹⁰¹⁶ The ICTY Committee reviewing the destruction caused by the NATO bombing in Serbia and Kosovo stated that ‘much of the environmental contamination which is discernible cannot unambiguously be attributed to the NATO bombing’.¹⁰¹⁷ Although the Committee had a report from UNEP, the Committee was concerned that it ‘may not be a reliable indicator of the long term assessments regarding the long-term effects of the NATO bombing, as accurate assessments regarding the long-term effects of this contamination may not yet be practicable’.¹⁰¹⁸

In principle, a UNEP report would be admissible subject to the usual consideration of probative value, just like any other piece of evidence.¹⁰¹⁹ In this instance, the OTP Committee’s concern with the UNEP report stemmed from the need to show long-term harm to the environment, which could not be provided in the nearly contemporaneous UNEP report which was assembled within a year of the NATO bombing.¹⁰²⁰

As noted above, in the context of toxic dumping being prosecuted as the crime against humanity of other inhumane acts, there will likely be a multitude of factors that are relevant to

¹⁰¹³ For an application of this principle in criminal proceedings, see *R v Blaue* (1975) 61 Cr App R 271 (UK).

¹⁰¹⁴ Jensen and Teixeira (2005), p.664. An issue would arise if a commander’s attacks did not *per se* cause grave environmental damage but nonetheless prevented firefighters of the opposing party being able to access the area, leading to far greater environmental damage than would otherwise have occurred. Under a theory of indirect causation, such conduct could potentially lead to liability for the grave environmental damage on the part of the commander if the other required elements were fulfilled. An analogy is the deprivation or hindrance of medical treatment, which leads to victims suffering worse injuries than they otherwise would have, or else avoidable death; see, e.g., *Trial of Heinrich Gerike and Seven Others*, British Military Court, Brunswick, 20th March-3rd April, 1946, UNWCC, vol. VII, pp 76-81.

¹⁰¹⁵ Final Report on NATO (2000).

¹⁰¹⁶ Final Report on NATO (2000), para. 17.

¹⁰¹⁷ Final Report on NATO (2000), para. 17 (emphasis added).

¹⁰¹⁸ Final Report on NATO (2000), para. 17.

¹⁰¹⁹ See *infra* Chapter III(C)(2)(a).

¹⁰²⁰ Final Report on NATO (2000), para. 17.

the assessment of the harm caused to the victim community.¹⁰²¹ Obtaining evidence showing that the acts of the accused caused the harm to human beings may be difficult in light of the multi-factorial nature of sickness arising from environmental factors. For example, in the case of the dumping of chemicals in Abidjan, no autopsies were performed to verify the cause of death,¹⁰²² and the pre-existing pollution levels in the lagoon prior to the dumping was considered too high to allow for identification of the hazardous waste in question.¹⁰²³ NGOs reporting on the toxic dumping also acknowledged the difficulty of measuring the specific environmental impact caused by the dumping.¹⁰²⁴ This demonstrates both the importance and the challenges presented by prosecuting environmental harm under international law.

Some guidance for the types of evidentiary material needed to establish causation and responsibility for multi-faceted environmental damage can be gleaned from the United Nations Claims Commission in relation to damage caused by Iraq's invasion and occupation of Kuwait in 1990-1991. Panel F4 confronted the issue of concurrent or parallel causes of environmental damage. It apparently required a standard of direct causation:

“Iraq is, of course, not liable for damage that was unrelated to its invasion and occupation of Kuwait, nor for losses or expenses that are not a direct result of its invasion and occupation of Kuwait. However, Iraq is not exonerated from liability for loss or damage that resulted directly from the invasion and occupation simply because other factors might have contributed to the loss or damage. Whether or not any environmental damage or loss for which compensation is claimed was a *direct* result of Iraq's invasion and occupation of Kuwait will depend on the evidence presented in relation to each particular loss or damage.”¹⁰²⁵

Accordingly, the broad lines of the approach taken by the panel were that damage resulting from causes wholly unconnected with Iraq's invasion and occupation of Kuwait was not compensable. For damage resulting from Iraq's invasion or occupation of Kuwait that was

¹⁰²¹ For this crime, it must be shown that “The perpetrator inflicted great suffering, or serious injury to body or to mental or physical health, by means of an inhumane act” and that the act was of a similar character to other acts listed in article 7(1) of the Rome Statute; see Elements of Crimes, p.12, article 7(1)(k).

¹⁰²² UNDAC (2006), p.10.

¹⁰²³ UNDAC (2006), p.10.

¹⁰²⁴ Amnesty Report on Cote d'Ivoire (2012), Annex 1, p.212 (“Predicting or detecting any mid and long-term implications for the environment arising from the dumping would be a speculative exercise and a near impossibility against a background of poor waste management practice, a huge variety of dumping places, poor baseline data on environmental pollution and unresolved issues around the exact composition of the waste.”).

¹⁰²⁵ United Nations Compensation Commission Governing Council, Report and Recommendations made by the Panel of Commissioners Concerning the Second Instalment of “F4” Claims, S/Ac.26/2002/26, 3 October 2002, Para.25 (“UNCC (2002)”).

also aggravated by other factors,¹⁰²⁶ “due account” of those factors would be taken into account in determining the appropriate level of compensation.¹⁰²⁷ In order to assess which proportion of the damage was attributable to Iraq’s actions, there had to be a reasonable basis in the supporting materials.¹⁰²⁸ The Panel also held that “each claimant has a duty to mitigate environmental damage to the extent possible and reasonable in the circumstances.”¹⁰²⁹

Longitudinal studies will be useful and in some cases necessary to demonstrate the nature of the damage and how the damage manifested in the environment over time, as well as the severity of the damage. However, measured against the exacting standard of beyond reasonable doubt, the duration and extent of the environmental harm may not be amenable to clear proof. Unlike most crimes, where there is a discrete death, injury, or piece of destruction, environmental harm is often a much more complex phenomenon to measure and attribute, particularly given the dynamic nature of the environment and its ability to regenerate.¹⁰³⁰ Studies designed to establish the harm can be expensive and labour intensive. For example, the United Nations Claims Commission awarded 243 million USD for the initial monitoring and assessment of the environmental harm purportedly caused by Iraq’s invasion of Kuwait in 1990.¹⁰³¹ The ICC’s already overstretched budget could hardly afford to engage in such expensive activities to establish one element of a crime.¹⁰³² In this respect, the ICC’s framework is not well adjusted for the prosecution of environmental harm and unresolvable obstacles may prevent the court conducting effective prosecutions and trials.

In the case of military attacks resulting in excessive harm to the environment, the impact requirements will necessitate a significant body of evidence to satisfy the elements of the

¹⁰²⁶ The F4 panel noted that “In each of the claimant countries and in the region as a whole, there are natural and other phenomena that could result in environmental damage, depletion of natural resources or risks to public health of the same or similar type as those that are the subject of some of the claims. It is, therefore, possible that some of the damage revealed by monitoring and assessment activities resulted from causes other than the effects of Iraq’s invasion and occupation of Kuwait. It is also possible that the cause of the damage was a combination of the effects of Iraq’s invasion and occupation of Kuwait together with phenomena and activities that occurred before or after that event.” UNCC Recommendations First Instalment (2001), para.33.

¹⁰²⁷ The F4 Panel also took into account the potential difficulty created by a lack of baseline documentation as to the pre-Invasion state of the environment: “Moreover, in some of the countries there may not be adequately documented baseline information on the state of the environment or on conditions and trends regarding natural resources prior to Iraq’s invasion and occupation of Kuwait.” UNCC Recommendations First Instalment (2001), para.34.

¹⁰²⁸ UNCC (2004), Para.36.

¹⁰²⁹ United Nations Compensation Commission Governing Council, Report and Recommendations made by the Panel of Commissioners Concerning the Third Instalment of “F4” Claims, S/AC.26/2003/31, 18 December 2003, Para.42 (“UNCC (2003)”).

¹⁰³⁰ Weinstein (2005), p.708; Final Report on NATO (2000), para.16.

¹⁰³¹ UNCC Recommendations First Instalment (2001), para.779.

¹⁰³² Stuart Ford, “How Much Money Does the ICC Need?”, in Stahn (2015), pp.84-104.

crime, as set out in article 8(2)(b)(iv). Proving the impact of the destructive act could be achieved through various sources of evidence such as witness testimony, documents, biological or soil samples or aerial images. Aerial images were used effectively in cases concerning the mass killings of Bosnian Muslims in and around Srebrenica. The images provided visual evidence of the disturbance of large areas of earth in locations of primary and secondary mass graves of the victims, matching the evidence of survivors of these atrocities and other witnesses.¹⁰³³

To establish the nature of the environmental harm (for example long-term, widespread and severe damage in the case of article 8(2)(b)(iv) of the Rome Statute), evidence from scientific experts would likely take a leading role.¹⁰³⁴ The parameters governing expert evidence as discussed in more detail below, but it is notable at this stage to note that guidance can be drawn from the UNCC's approach to assessing the extent of the environmental impact caused by Iraq to Kuwait during the 1990 invasion and occupation. During the UNCC's enquiries into the environmental damage caused by Iraq's invasion of Kuwait in 1990, the F4 Panel on environmental damage retained expert consultants from a variety of fields including chemistry; toxicology; biology (including microbiology, marine biology, biological oceanography, marine zoology and plant pathology); medicine; epidemiology; environmental, ecological and natural resource economics; geology (including geochemistry, hydrology, geocology); atmospheric sciences; oil spill assessment and response; rangeland management; and accounting.¹⁰³⁵ While the standard of proof before the UNCC was lower than in a criminal context,¹⁰³⁶ these same areas of expertise would be relevant in order to prove crimes against the environment.

(iii) The person or persons responsible for the causative act and the manner in which they brought about the act

With serious environmental harm often being caused by group action, sometimes even at the societal level, there is likely to be many actors involved, and the corresponding dispersal of

¹⁰³³ See, e.g., *Prosecutor v. Vujadin Popović et. al.*, Case No. IT-05-88-T, Judgement, 10 June 2010 (“*Popović TJ*”), paras.75, 418.

¹⁰³⁴ Sands (2008), p.4.

¹⁰³⁵ UNCC Recommendations First Instalment (2001), para.42.

¹⁰³⁶ Article 35(3) of the Provisional Rules for Claims Procedure (the “Rules”) (S/AC.26/1992/10) provides that category “F” claims (which is the category that includes environmental damage) “must be supported by documentary and other appropriate evidence sufficient to demonstrate the circumstances and amount of the claimed loss”.

individual responsibility.¹⁰³⁷ Under the current ICC framework, only natural persons can be prosecuted, making it all the more important to obtain sufficient evidence to attribute liability for serious environmental harm to one person.

Evidence to prove the specific person or persons responsible for the environmental harm could include a broad range of sources, including witness testimony, or documentary evidence such as orders or communications. Military log books and diaries are particularly useful to establish the responsibility of members of armed forces for serious crimes and have been admitted in numerous cases and relied on by chambers in entering convictions,¹⁰³⁸ including in the post-World War Two Hostages case, which included scorched earth charges against the accused Rendulić.¹⁰³⁹ Bank records and other documents evidencing financial flows may provide powerful indicia of involvement in illicit acts, particularly wildlife crime and toxic dumping. Investigations by the non-governmental organization the Wildlife Justice Commission have unearthed such financial records indicating the involvement of a network of over 50 individuals in the illegal trade of ivory, elephant, tiger and other endangered animals.¹⁰⁴⁰ The records indicate that Vietnamese nationals have established bank accounts in China in order to facilitate Chinese buyers and traders looking for illicit wildlife products.¹⁰⁴¹ Buyers and traders used programs such as facebook and WeChat to conduct their deals, making these platforms also potential sources of evidence.¹⁰⁴²

Social media increasingly plays a role in investigations and prosecutions before international courts. Efforts to identify the responsible party for environmental damage may benefit from contemporaneous videos and other audio-visual material placed on social media, as well as text-based statements. For example, ISIS, which reportedly has burned oil installations in Iraq in 2016,¹⁰⁴³ is known for its modus operandi of publicising its acts such as destroying cultural heritage on YouTube and other platforms.

¹⁰³⁷ G. Simpson, 'Crime, Structure, Harm', in S. Jodoin and M.C. Cordonier Segger (eds.) *Sustainable Development, International Criminal Justice, and Treaty Implementation* (2013) at 48.

¹⁰³⁸ See, e.g., *Popović* TJ, paras.76-82, 83-85, 368, 1129 (referring to Ex. P00295, "Zvornik Brigade July 1995 Vehicle work log book"); *Prosecutor v. Vlastimir Đorđević*, Case No. IT-05-87/1-T, 23 February 2011, paras.167, 478, 800.

¹⁰³⁹ See *Hostages* Trial ("The prosecution has produced oral and documentary evidence to sustain the charges of the indictment. The documents consist mostly of orders, reports and war diaries which were captured by the Allied Armies at the time of the German collapse.").

¹⁰⁴⁰ Wildlife Justice Commission (2016), p.3.

¹⁰⁴¹ Wildlife Justice Commission (2016), p.4, point 8.

¹⁰⁴² Wildlife Justice Commission (2016), p.4, point 7.

¹⁰⁴³ UNEP (2017), p.2.

Forensic examinations will serve two primary purposes in relation to wildlife exploitation – identifying the identity and origin of the species and linking the suspects to the crimes.¹⁰⁴⁴ It would generally be necessary to carry out some form of identification or morphological testing to identify the animal or plant species in question from the living specimen or part or derivative that has been located.¹⁰⁴⁵ While this may be readily recognisable in some cases where bones, hair, feathers, scales or organs and tissues allow, others will require more involved testing, including DNA testing.¹⁰⁴⁶ For some wildlife exploitation, which involve the mistreatment of the animal in question, a pathological study, or forensic entomology, may be required to establish the timing and cause of death, including by detecting lesions, bruises, wounds, and scars and attempting to ascertain the nature of the instrument causing the injuries.¹⁰⁴⁷ For example, crushing lesions are likely to indicate the use of traps, whereas strangulation or impairment to blood flow may indicate the use of nets or snares.¹⁰⁴⁸ For illegal logging, satellite technology may be of significant assistance in monitoring and proving the nature and extent of the crime.¹⁰⁴⁹

As set out above, in any corporate or group-perpetrated environmental harm, insider witnesses from organisations that caused the environmental harm would be important sources of evidence. Witnesses who have worked within organizations are familiar with the internal power structures and specific decision-makers within these organizations. In cases where the harm was caused by corporate entities,¹⁰⁵⁰ insider witnesses would assist to pierce the corporate veil in order to attribute responsibility to particular individuals whose actions and decisions led to the environmental harm, though their evidence should be treated carefully.¹⁰⁵¹

To link suspects to the crimes, many techniques may be relevant, including ballistics studies of bullets from carcasses or bullet casings, samples from the illegally taken species being present on a suspect's person or in their vehicle, or a suspect's DNA being present at the scene of the crime.¹⁰⁵² The investigation of electronic equipment used by suspects may also yield significant information, such as mobile phones, computers, cameras, and storage

¹⁰⁴⁴ UNODC Toolkit (2012), p.96.

¹⁰⁴⁵ Cooper et. al. (2009), p.7.

¹⁰⁴⁶ UNODC Toolkit (2012), p.96; Cooper et. al. (2009), p.7.

¹⁰⁴⁷ UNODC Toolkit (2012), p.96; Cooper et. al. (2009), p.7.

¹⁰⁴⁸ Cooper et. al. (2009), p.8.

¹⁰⁴⁹ UNODC Toolkit (2012), p.96.

¹⁰⁵⁰ See *infra* Chapter II(B)(1).

¹⁰⁵¹ *Eliézer Niyitegeka v. Prosecutor*, Case No. ICTR-96-14-A, Appeal Judgement, 9 July 2004, para. 98. See also *Nahimana AJ*, para. 439, and *Prosecutor v. Vidoje Blagojević & Dragan Jokić*, Case No. IT-02-60-A, Appeal Judgement, 9 May 2007, para.82.

¹⁰⁵² UNODC Toolkit (2012), p.97.

devices.¹⁰⁵³ Investigating financial transactions is also a fruitful area to capture wildlife crime and link it to specific suspects.¹⁰⁵⁴

(iv) The knowledge and intent of the accused

Investigating and proving the *mens rea* of the accused in relation to environmental harm will entail considerable difficulties. The one provision in the Rome Statute that explicitly addresses environmental harm incorporates an exacting three-part *mens rea* test,¹⁰⁵⁵ and the other environmental crimes will require at least¹⁰⁵⁶ knowledge and intent on the part of the accused if prosecuted under the existing substantive provisions of the Rome Statute.¹⁰⁵⁷

Inferences based on circumstantial evidence are often used to establish an accused's knowledge of criminal offending by their subordinates. International jurisprudence recognises the validity of such an approach, with the firm caveat that inferential findings that are decisive of an accused's liability must be the only reasonable inference based on the evidence adduced.¹⁰⁵⁸ The practice of inferring knowledge and intent is also taken in domestic cases, including for environmental harm.¹⁰⁵⁹ For example, in the US, domestic courts have pointed out that fact finders can draw (negative) inferences against the accused if a transporter or recipient of waste offers to take it away at an unusual price or under unusual circumstances, in light of the common knowledge that disposing hazardous waste is an expensive process.¹⁰⁶⁰

Evidence that could be used to prove an accused's knowledge of the excessive harm to the environment resulting from an attack would include documents, insider witness testimony, and any statements by the Accused. Orders, such as "no-strike" orders, listing the locations of particular sensitivity because of their potential destructive impact on the environment would assist in showing that the Accused was aware of the potential danger of striking a certain

¹⁰⁵³ UNODC Toolkit (2012), p.97.

¹⁰⁵⁴ UNODC Toolkit (2012), p.98.

¹⁰⁵⁵ See *infra* Chapter II(D)(1)(b)(v).

¹⁰⁵⁶ The Basel Convention refers to "deliberate" dumping or unlawful transport of materials, which, in combination with article 30 of the Rome Statute, would be an exacting standard to meet.

¹⁰⁵⁷ Rome Statute, article 30.

¹⁰⁵⁸ See, e.g., *Prosecutor v. Vasiljević*, Case No.IT-98-32-A, Appeal Judgement, para.120.

¹⁰⁵⁹ See, e.g., David Uhlman, "Prosecutorial Discretion and Environmental Crime", *Harvard Environmental Law Review*, Vol.38, (2014), p.479 ("the Tenth Circuit has allowed a jury to infer both knowledge and control of environmental crimes on the part of corporate officers based on circumstantial evidence"). See also *United States v. Self*, 2 F.3d 1071, 1088 (10th Cir. 1993) (sustaining conviction against corporate president because evidence was sufficient to allow jury to infer that defendant knew of illegal storage of hazardous waste); See *United States v. Hansen*, 262 F.3d 1217 (11th Cir. 2001) (finding that an admitted goal "to operate the plant until a buyer could be found" and knowledge of the plant's problems with environmental compliance allowed the jury to infer that corporate officers had reached a tacit agreement to operate the plant in violation of environmental laws).

¹⁰⁶⁰ *United States v. Hayes International Corp*, 786 F.2d 1499, 1502-1504 (11th Cir. 1986).

location.¹⁰⁶¹ Difficulties would arise where the underlying information was held by various individuals within an organization, with no one person possessing knowledge of all aspects of the criminal offending. In the context of corporate criminal liability, this obstacle can be overcome through attribution of the knowledge of individual corporate personnel to the overarching corporate structure.¹⁰⁶²

The environmental harm charge of military attacks entailing excessive harm to the environment, under article 8(2)(b)(iv), requires that the accused appreciate that the environmental harm would be excessive to the anticipated military advantage. As discussed elsewhere, this *mens rea* requirement may prove extremely difficult to establish, and it is unclear what type of evaluation the commander must be shown to have made.¹⁰⁶³ From a procedural and evidentiary perspective, the legal uncertainty exacerbates the evidentiary burden, as it is not clear which evidence would be required to show that an individual consciously considered that an attack would cause excessive environmental harm but nonetheless proceeded with it. In this respect, the unclear drafting of article 8(2)(b)(iv) may result in a measure of adjudicative incoherence.

UNEP has reported that a significant challenge in enforcing prohibitions of toxic dumping and illegal transboundary movement of hazardous substances is proving the existence of a “waste” that is “hazardous”. A substance or an object is considered waste under the Basel Convention if it is disposed of, intended to be disposed of or if it is required to be disposed of under national law. However, often specifically listed hazardous wastes are mixed with other wastes and are only revealed through laboratory testing.¹⁰⁶⁴ Even if the presence of the hazardous substance can be determined with certainty, the people caught handling the waste may be able to argue that they were unaware that prohibited substances were mixed into the waste, then putting the onus on the prosecution to establish how the toxic substances came to be present.

To prove the accused’s *mens rea* concerning wildlife exploitation, access to records or documents prepared or used by the persons conducting the capture or sale of the animal or

¹⁰⁶¹ Jensen (2005), p.666-667.

¹⁰⁶² See for example, article 46C of the Protocol to the Statute of the African Court of Justice and Human Rights, which provides that a corporation’s knowledge “may be established by proof that the actual or constructive knowledge of the relevant information was possessed within the corporation [...] even though the relevant information is divided between corporate personnel.”

¹⁰⁶³ See, in particular Matthew Gillett, “Chapter 6: Environmental damage and international criminal law” in “Securing the Rights of Future Generations: Sustainable Development and the International Criminal Law Regime in Practice” (Sébastien Jodoin, Marie-Claire Cordonier Segger & Maja Göpel, eds.) (August 2013).

¹⁰⁶⁴ UNEP Basel Convention guide para.64.

plants will be highly significant. In this respect, State cooperation will likely be a major determinant of the success of an investigation. As with toxic dumping, insider witnesses will not always be strictly necessary for an investigation of wildlife exploitation, but will nonetheless be an extremely valuable source of information, particularly in relation to the responsibility of specific individuals within the organization or group carrying out the illegal acts. Scientific evidence concerning the identity of the species and the impact on these species of the trade or exploitation will be fundamental to any investigation.

For wildlife exploitation, domestic law will potentially be a relevant factor. If the person conducting the trade has a domestic lawful permit to do so, for example, then they may seek to deny responsibility, invoking doctrines like reliance on an official act or opinion. The Rome Statute makes clear that ignorance of the law is generally not a defence to criminal responsibility (unless it negates the mental element of the offence)¹⁰⁶⁵ and that prescription of law is not a defence to crimes against humanity and genocide.¹⁰⁶⁶

In relation to an accused's *mens rea*, the defence of duress or necessity¹⁰⁶⁷ could potentially be raised as an excuse for environmental harm. Under the Rome Statute duress applies whenever

“The conduct which is alleged to constitute a crime within the jurisdiction of the Court has been caused by duress resulting from a threat of imminent death or of continuing or imminent serious bodily harm against that person or another person, and the person acts necessarily and reasonably to avoid this threat, provided that the person does not intend to cause a greater harm than the one sought to be avoided. Such a threat may either be (i) Made by other persons; or (ii) Constituted by other circumstances beyond that person's control.”¹⁰⁶⁸

The defence set out in article 31(1)(d) is a conflation of two separate means of avoiding liability: the *excuse* of duress, whereby the will of the accused has been overborne excluding their responsibility for the harmful conduct, and the *justification* of necessity, whereby the

¹⁰⁶⁵ Rome Statute, article 32.

¹⁰⁶⁶ Rome Statute, article 33.

¹⁰⁶⁷ Whereas duress concerns a threat of compulsion emanating from a person, necessity addresses those arising from the objective circumstances; Cassese and Gaeta (2008), p.280.

¹⁰⁶⁸ Rome Statute, article 31(1)(d).

accused is responsible for the harmful conduct but their conduct is considered justified because they sought to avoid a greater harm than the harm they caused.¹⁰⁶⁹

In relation to the excuse of duress, it is only anthropocentric harm, in terms of the threat of imminent death or continuing or imminent serious bodily harm, as specified under article 31(1)(d), that will activate the defence. Eco-centric threats will not satisfy this test *per se*, and would only be relevant to the extent they entail those stated anthropocentric risks.

In relation to the justification of necessity, article 31(1)(d) in effect limits the availability of this justification, by establishing a threshold requirement of a threat of imminent death or continuing or imminent serious bodily harm. Presuming such a threat is shown, novel questions would arise in relation to crimes of environmental harm, potentially pitching anthropocentric interests against eco-centric interests. For example, if an accused was shown to be responsible for serious environmental harm, such as launching a military attack which would be anticipated to result in excessive environmental harm, toxic dumping, or wildlife exploitation, but argued that they did so in order to avoid a greater harm, the question would arise as to whether and how different types of harm can be weighed for the purposes of article 31(1)(d).¹⁰⁷⁰ What if the toxic material were dumped in a nature reserve in order to avoid the risk of imminent anthropocentric harm (such as the material being dumped in a human settlement)? And what if members of a rare, endangered species were killed for bushmeat to avoid human starvation? How would the eco-centric harm in each instance be weighed against the anthropocentric harm?

The issue revolves around the term “greater harm” in article 31(1)(d). However, in *Ongwen*, where the defence of duress was raised by the defence, the judges did not elaborate on the meaning of this term in article 31(1)(d), and the relevant harms were anthropocentric.¹⁰⁷¹ Similarly, in *Erdemović*, which is the only case at the *ad hoc* tribunals where duress has been substantively addressed, the relevant harm of killing humans was exclusively anthropocentric in nature.¹⁰⁷² The 2004 United Kingdom military manual refers to a situation of severe food shortages as justifying a prisoner of war camp commander putting prisoners on rations below

¹⁰⁶⁹ Albin Eser, “Article 31”, in *Commentary On The Rome Statute Of The International Criminal Court* 863, 867 (Otto Triffterer ed., 2d ed. 2008), pp.883-884; Benjamin J. Risacher, “No Excuse: The Failure of the ICC’s Article 31 “Duress” Definition”, 89 *Notre Dame L. Rev.* 1403 (2014) (“Risacher (2014)”), p.1417.

¹⁰⁷⁰ On the question of balancing the type of harm for article 31(1)(d) see Risacher (2014), pp.1417-1418.

¹⁰⁷¹ *Prosecutor v. Dominic Ongwen*, Case No. ICC-02/04-01/15, Situation in Uganda, ‘Decision on the confirmation of charges against Dominic Ongwen’, 23 March 2016, paras.151-156.

¹⁰⁷² See, e.g., *Prosecutor v. Erdemovic*, Case No. IT-96-22-A, Judgement, 7 October 1997 (and separate and dissenting opinions).

the minimum standards set out in the Geneva Conventions.¹⁰⁷³ At present, it remains to be seen how pure eco-centric harm would be weighed against the imminent threat to life or limb that potentially allows the defence under article 31(1)(d) to be argued.

Whereas common law approaches traditionally distinguish between mistakes of fact, which provided a viable defence, and mistakes of law, which do not, the ICC Rome Statute takes a mixed approach whereby mistakes of law are generally invalid as a defence unless they negate the mental element required for the crime.¹⁰⁷⁴ Environmental harm leaves considerable room for mistakes of law to negate the mental element of the crime – particularly given the prevalence of regulatory offences, and failure to maintain adequate records, as typical environmental offences. In the context of hazardous dumping or trafficking charges, evidence such as permits from the government concerning the allegedly hazardous materials could be critical for the defence to argue that the conduct was approved or at least a colourable mistake of fact or law vitiates the accused's liability for the dumping or trafficking charges.

Presuming one of the crimes under the Rome Statute were demonstrated through environmentally harmful conduct, the accused may potentially raise the issue of self-defence under article 31(1)(c) of the Rome Statute.¹⁰⁷⁵ The nature of scorched earth tactics as a defensive tactic would not be sufficient *per se* to exclude liability; the Rome Statute clarifies that the fact a person was involved in a defensive operation when they conducted the harmful act(s) is not ground to exclude criminal responsibility due to self-defence.¹⁰⁷⁶ Nonetheless, if the enemy were unlawfully threatening people and/or property with imminent harm, and the measures taken were proportionate to the level of danger, the accused could seek to rely on this provision. In determining whether the tactics were proportionate to the threat, the Court could rely on notions of customary international law.¹⁰⁷⁷ For example, the ICRC requires that all feasible measures be taken to limit environmental harm when engaging in military conflicts.¹⁰⁷⁸

¹⁰⁷³ The 2004 UK Manual states that necessity (objective duress) applies: 'where a country suffers a severe food shortage...', p.443; Cassese and Gaeta (2008), p.283-284.

¹⁰⁷⁴ Rome Statute, article 32(2); Ambos (2011), pp.320-323.

¹⁰⁷⁵ Rome Statute, article 31(1)(c) ("The person acts reasonably to defend himself or herself or another person or, in the case of war crimes, property which is essential for the survival of the person or another person or property which is essential for accomplishing a military mission, against an imminent and unlawful use of force in a manner proportionate to the degree of danger to the person or the other person or property protected.").

¹⁰⁷⁶ Rome Statute, article 31(1)(c).

¹⁰⁷⁷ Rome Statute, article 21(1)(b).

¹⁰⁷⁸ See ICRC Study, Rule 44 ("Methods and means of warfare must be employed with due regard to the protection and preservation of the natural environment. In the conduct of military operations, all feasible

(e) Expert evidence concerning environmental harm

Given the centrality of technical and scientific evidence in cases of environmental harm, proceedings before the ICC are likely to place considerable emphasis on expert evidence.¹⁰⁷⁹ Scientific evidence is increasingly prevalent in general international litigation,¹⁰⁸⁰ and expert evidence is a regular feature of international criminal cases. Criminal trials featuring complex technical evidence will require considerable assistance from experts: already in international criminal trials, expert evidence is a regular and prominent component of the evidence adduced.¹⁰⁸¹ In cases focusing on technical issues like shelling and ballistics, the level of expert evidence is particularly high,¹⁰⁸² which suggests that in the scientifically focused areas of environmental harm, such as military attacks expected to cause excessive harm to the environment, toxic dumping, and wildlife exploitation, expert evidence will play a central and major role in proceedings. Given the high proportion of scientific evidence, about which “opinions and discoveries are often overturned by new research and conflicting opinions exist”,¹⁰⁸³ expert evidence will be particularly valuable for the judges in reaching their verdict on environmental harm.

For example, in relation to wildlife exploitation, several, if not all of the following types of technical tests, which could be relevant to establish the offence, would need expert evidence to be introduced to the court: gross, microscopic, iso-electric focusing, and DNA testing for species and parentage, radiography, cytology, and bacteriology.¹⁰⁸⁴ These tests would help establish the identity of the species involved in order to discern lawful from unlawful behaviour. They can also assist to establish where the members of an endangered species have

precautions must be taken to avoid, and in any event to minimize, incidental damage to the environment. Lack of scientific certainty as to the effects on the environment of certain military operations does not absolve a party to the conflict from taking such precautions.”)

¹⁰⁷⁹ Sands (2008), p.4.

¹⁰⁸⁰ Jean D'Aspremont and Makane Moïse Mbengue, “Strategies of Engagement with Scientific Fact-Finding in International Adjudication” (2013) 5 *Journal of International Dispute Settlement*, 2014 (“D'Aspremont and Mbengue (2014)”), p.14.

¹⁰⁸¹ Arthur Appazov, “Expert Evidence and International Criminal Justice”, Springer 2016, p.6 (“the prosecution of the international criminal courts often times resorts to seeking the assistance of experts—historians, sociologists and other social scientists, human rights activists and military professionals—who can provide relevant information in order to establish contextual elements of international crimes—war crimes, crimes against humanity and genocide.”).

¹⁰⁸² See, e.g., *Prosecutor v. Ante Gotovina et. al.*, Case No.IT-06-90-T, Judgment, 15 April 2011, para.23 (noting that 14 experts were called during the trial); *Prosecutor v. Dragomir Milošević*, Case No.IT-98-21/1-T, Judgement, 12 December 2007 (throughout which several expert witnesses are mentioned).

¹⁰⁸³ Makane Mbengue, *Between law and science: A commentary on the Whaling in the Antarctic case*, available at: http://www.qil-qdi.org/between-law-and-science-a-commentary-on-the-whaling-in-the-antarctic-case-2/#_ftnref49 (last checked 26 December 2017).

¹⁰⁸⁴ Cooper et. al. (2009), p.6.

come from if they are located in a foreign market, and to trace back to the route taken from the area where they were poached, to the various points where they were then sold, which can assist to identify the perpetrators.

In cases of environmental harm, experts will be needed to analyse the evidence, and present their expert conclusions based thereon. In this manner, they will help to explain the complex scientific parts of the case to the adjudicators.¹⁰⁸⁵ As Judges Al-Khasawneh and Simma explained in the *Pulp Mills* environmental harm case at the ICJ “the adjudication of disputes in which the assessment of scientific questions by experts is indispensable (...) requires an interweaving of legal process with knowledge and expertise that can only be drawn from experts properly trained to evaluate the increasingly complex nature of the facts put before the Court. The Court on its own is not in a position adequately to assess and weigh complex scientific evidence of the type presented by the Parties.”¹⁰⁸⁶

(i) The definition of an expert at the international criminal court

The definition of an expert witness at the international criminal court is relatively well-settled and essentially follows the definition adopted at the *ad hoc* tribunals. In *Ntaganda* the Court relied on ICTY jurisprudence in describing an expert as “a person who, by virtue of some specialised knowledge, skill or training can assist the Chamber in understanding or determining an issue of a technical nature that is in dispute”.¹⁰⁸⁷ It continued that “expert witnesses are ordinarily afforded wide latitude to offer opinions within their expertise and their views need not be based upon first-hand knowledge or experience.”¹⁰⁸⁸ On a similar note, the Appeals Chamber of the ICTR has observed that “in the ordinary case the expert witness lacks personal familiarity with the particular case, but instead offers a view based on

¹⁰⁸⁵ See, e.g. Eurojust (2014), p.11 (“only experts can determine with certainty if species found are indeed endangered, the category under which they fall, and whether a penal response to the illegal trade has been triggered.”), p.32 (“Experts are needed, for example, to decide if certain items qualify as waste, if waste is exported for recovery or re-use, or if an egg belongs to a specific protected species.”).

¹⁰⁸⁶ *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Joint Dissent of Judges Simma and Al-Khasawneh, [2010] ICJ Rep110, para 3. See also ICJ Nuclear Weapons Advisory Opinion (1996), p.236-37.

¹⁰⁸⁷ *Prosecutor v. Bosco Ntaganda*, Decision on Defence preliminary challenges to Prosecution's expert witnesses, ICC-01/04-02/06-1159, 9 February 2016 (“*Ntaganda* Decision (2016)”), para.7 citing *Prosecutor v. Vujadin Popović et. al.*, Case No. IT-05-88-Ar73.2, Decision on Joint Defence Interlocutory Appeal Concerning the Status of Richard Butler as an Expert Witness, 30 January 2008 (“*Popović* Butler Decision”), para.27. See also *Laurent Semanza v. Prosecutor*, Case No. ICTR-97-20-A, Judgement, 20 May 2005, para.303.

¹⁰⁸⁸ *Ntaganda* Decision (2016), para.9.

his or her specialized knowledge regarding a technical, scientific, or otherwise discrete set of ideas or concepts that is expected to lie outside the lay person's ken.”¹⁰⁸⁹

An expert witness must be sufficiently qualified in order to testify about matters going beyond their personal experience; the testimony of an unqualified person on such matters going beyond their experience would not assist the trier of fact and would thus be irrelevant.¹⁰⁹⁰ Determining whether a person has sufficient expertise takes into account the person's education, experience in the relevant field, publications, and additional background relating to the subject on which they would testify.¹⁰⁹¹

(ii) The subject-matter of expert testimony in environmental harm cases

As set out above, it falls to the Court's discretion whether to accept a person as an expert, though this discretion must be exercised reasonably, if it is abused it may be overturned on appeal.¹⁰⁹² Like other evidence, the trial chamber will weigh up probative evidence from expert witnesses, and make the relevant determination. Although the ICC procedural framework allows for a “free” assessment of the evidence,¹⁰⁹³ the overarching standard against which the evidence will be assessed is whether the Prosecution has proved its case beyond reasonable doubt.¹⁰⁹⁴

Even if the witness is accepted as sufficiently qualified to be an expert, the scope of his or her expertise must cover the subject-matter of the evidence to be adduced.¹⁰⁹⁵ Given the broad range of scientific evidence that would be relevant in the adjudication of charges of environmental harm, the scope of the witness's expertise would be a significant factor to establish.¹⁰⁹⁶ For example, a person accepted as an expert on the impact of certain means and methods of war on fauna, such as mountain gorilla populations, may not be sufficiently qualified to speak to the impact of certain means and methods of war on flora.

The ambit of permissible expert testimony is also limited by the rule that expert evidence should not directly address ultimate issues of fact or law, as this would encroach on the

¹⁰⁸⁹ *Laurent Semanza v. Prosecutor*, Case No. ICTR-97-20-A, Judgement, 20 May 2005, para.303.

¹⁰⁹⁰ Khan et. al. (2010), p.614.

¹⁰⁹¹ Khan et. al. (2010), p.614-615.

¹⁰⁹² *Popović* Butler Decision, para.9.

¹⁰⁹³ See, e.g., *Situation in the Democratic Republic of Congo in the Case of the Prosecutor v. Thomas Lubanga Dyilo*, Decision on the admissibility of four documents (TC), ICC-01/04-01/06, 13 June 2008, para.24.

¹⁰⁹⁴ Rome Statute, article 66(3).

¹⁰⁹⁵ Khan et. al. (2010), p.615-616.

¹⁰⁹⁶ *Ntaganda* Decision (2016), para.8; *Popović* Butler Decision, para.27.

province of the chamber.¹⁰⁹⁷ Experts are also in theory not supposed to provide evidence as to the law that the international criminal court should apply. However, at the international courts, this principle is not strictly followed.¹⁰⁹⁸ In practice, experts frequently provide evidence that goes to ultimate issues of fact and sometimes law.¹⁰⁹⁹ For example, the Appeals Chamber in *Gotovina* held that the Trial Chamber erred by not addressed Witness Jones' evidence. This evidence went to the core of Gotovina's responsibility for crimes, as Jones "considered that Gotovina took all necessary and reasonable measures to ensure that his subordinates in the Krajina enforced appropriate disciplinary measures."¹¹⁰⁰

(iii) The role of the expert: neutral interlocutor or partisan witness?

Because experts are allowed to provide evidence on matters that they did not personally witness, they occupy a privileged position in the process of determining facts before the courts. The question arises as to whether the privileged position of experts comes with a concomitant duty to the Court. Although there is a heightened expectation of neutrality on the part of an expert before the international tribunals, it is not definitively established in the jurisprudence that the expert has an overriding duty to the Court. This contrasts with England, for example, where an expert does have such a duty.¹¹⁰¹ Nonetheless, any possible bias may be explored in cross-examination of the expert. An expert's evidence should usually be

¹⁰⁹⁷ *Prosecutor v. Édouard Karemera & Matthieu Ngirumpatse*, Case No. ICTR-98-44-T, T.Ch., Decision on Prosecution Motion for Reconsideration of the Decision on Prospective Experts Guichaoua, Nowrojee and Des Forges, or for Certification, para.21. ("The Chamber, however, recalls that the established jurisprudence of this Tribunal proscribes expert evidence from usurping the function of the Trial Chamber by offering opinions that are determinative of the guilt or innocence of the Accused or by adverting to the acts, conduct and mental state of the Accused. Admitting the evidence of Des Forges, as suggested by the Prosecution, would be amount to usurping the functions of the Chamber in determining the guilt or not of the Accused."); *Prosecutor v. Hadžihasanović and Kubura*, Decision on Report of Prosecution Expert Klaus Reinhardt, Case No. IT-01-47-T, T. Ch. II, 11 February 2004, p. 4.

¹⁰⁹⁸ *Prosecutor v. Mučić et. al.*, Case No. IT-96-21, Order on the Prosecution's Motion for Leave to Call Additional Expert Witnesses (noting that "during oral argument on the Motion before the Trial Chamber on 23 October 1997, the Defence for all four accused ("Defence") objected to the calling of Professor Economides since it did not consider it to be an appropriate use of an expert witness when the witness is to testify to the Trial Chamber on international law, and in the view of the Defence, the determination of international law remains within the exclusive province of the Trial Chamber" but allowing the Prosecution to call the witnesses anyway). See also transcript of 2 October 1997, T.8184-8195.

¹⁰⁹⁹ Khan et. al. (2010), p.616-617.

¹¹⁰⁰ *Prosecutor v. Gotovina and Markac*, Case No.IT-06-90-A, Appeal Judgement, 16 November 2012, paras.131-133.

¹¹⁰¹ *Meadow v General Medical Council* [2007] 1 All ER 1; Harris [2006] 1 Cr App R 55; Khan et. al. (2010), p.108.

provided in full transparency, which includes providing access to the underlying material to the opposing party.¹¹⁰²

At the ECCC, the co-investigative judges or chambers appoint the experts upon the written request of the Co-Prosecutors, the Accused, or a civil party.¹¹⁰³ At the ICC, the pre-trial and trial chambers are imbued with a high level of control over the experts that can appear before them. The Judges' Regulations require that the expert be chosen from a list maintained by the Registry.¹¹⁰⁴ In the *Lubanga* proceedings, the Trial Chamber requested the Registry to select an expert on the issue of child soldiers and trauma, when the Prosecution expert acknowledged that this topic went beyond his area of expertise.¹¹⁰⁵ The ICC is increasingly inviting questions from all participants and drafting questions for experts to address based on those submissions.¹¹⁰⁶

Where experts arrive at diametrically opposed views, there is precedent from the Bosnian War Crimes Chamber for having the two experts attend court to testify at the same time in order to provide them with an opportunity to agree and to provide the trier of fact with the chance to directly compare the two.¹¹⁰⁷ This process is occasionally used domestically where it is referred to colloquially as "hot-tubbing". In line with this process, under ICC Regulation 44, the Court can order a jointly commissioned expert report.¹¹⁰⁸

According to ICTY jurisprudence, it is permissible for an expert to be a current or former employee of a Party to the proceedings; possible concerns of bias or lack of impartiality can be addressed during cross-examination.¹¹⁰⁹ The complaint has been raised that this will lead to implicit or explicit bias on the part of the expert, and that waiting until cross-examination is too late, as the harmful evidence will already be on the record.¹¹¹⁰ However, the deferred ruling has the advantage of allowing the judges to see the technical evidence, together with its

¹¹⁰² *Prosecutor v. Milan Martić*, Case No. IT-95-11, Decision on Prosecution's Motions for Admission of Transcripts Pursuant to Rule 92bis and of Expert Reports Pursuant to Rule 94bis, 13 January 2006, para.37; Khan et. al. (2010), p.628.

¹¹⁰³ ECCC Rules of Procedure and Evidence; Rule 31(10).

¹¹⁰⁴ ICC Judges Regulation 44.

¹¹⁰⁵ *Prosecutor v. Thomas Lubanga Dyilo*, Instructions to the Court's Expert on Names and other Social Connections to the DRC, ICC-01/04-01/06 (5 June 2009), paras.3, 17; Khan et. al. (2010), p.607.

¹¹⁰⁶ Khan et. al. (2010), p.607-608.

¹¹⁰⁷ *Prosecutor's Office of Bosnia and Herzegovina v Djukic* (First Instance Verdict) CtBiH-X-KR-07/394 (12 June 2009), paras.319-325; Khan et. al. (2010), p.110-111.

¹¹⁰⁸ Khan et. al. (2010), p.607.

¹¹⁰⁹ *Prosecutor v. Vujadin Popović et al.*, Case No. IT-05-88-T, Decision on Defence Rule 94bis Notice Regarding Prosecution Expert Witness Richard Butler, 19 September 2007, paras.26-27; *Popović* Butler Decision, paras.27, 31.

¹¹¹⁰ Khan et. al. (2010), p.613.

explanation, in its entirety, which is important for the type of technical evidence used to show environmental harm. For this reason, the test has remained a case-by-case assessment and chambers retain the discretion to completely exclude the evidence of a purported expert prior to testimony.¹¹¹¹

The broad discretion¹¹¹² enjoyed by chambers in relation to the tendering of expert evidence will be helpful in this regard and may see considerable innovation taken by the judges to ensure that sufficient evidence is received in a digestible format without distracting proceedings from the core issue of the responsibility of the individuals or individuals charged with the crimes.

(iv) Expert evidence on environmental matters: the judicial view

As a necessary component of their adjudicative function, judges must establish facts.¹¹¹³ Judicial fact-finding is traditionally binary, seeking to determine the veracity of a fact rather than its probability.¹¹¹⁴ Scientific fact-finding, contrastingly, involves a wider range of outcomes, including probabilities that are not easily transposed onto the beyond reasonable doubt judicial standard of proof in criminal law.¹¹¹⁵ The lack of certainty in scientific facts did not impede early adjudicators from entering sweeping findings.¹¹¹⁶ However, with well-trained experts, and the looming shadow of appellate review, first instance trial chambers are

¹¹¹¹ This can be done, for example, at the ICTY under Rule 95, which provides that evidence is not admissible if it is obtained by methods which cast substantial doubt on its reliability or if its admission is antithetical to, and would seriously damage, the integrity of the proceedings. See also the *Prosecutor v. Milan Milutinović et al.*, Case No. IT-05-87-T, Decision on Prosecution Request for Certification of Interlocutory Appeal of Decision on Admission of Witness Philip Coo's Expert Report, 30 August 2006, paras.1, 10 (the Trial Chamber found that the proposed expert witness was "too close to the team, in other words to the Prosecution presenting the case, to be regarded as an expert" and that "it could not regard his opinion as bearing the appearance of impartiality on which findings crucial to the determination of guilt of criminal charges might confidently be made.").

¹¹¹² See *Prosecutor v. Thomas Lubanga Dyilo*, Instructions to the Court's Expert on Names and other Social Connections to the DRC, ICC-01/04-01/06 (5 June 2009), paras.3, 17; Khan et. al. (2010), p.607.

¹¹¹³ Between law and science: Some considerations inspired by the Whaling in the Antarctic judgment, Tullio Scovazzi, available at (<http://www.qil-qdi.org/between-law-and-science-some-considerations-inspired-by-the-whaling-in-the-antarctic-judgment-2/>).

¹¹¹⁴ *D'Aspremont and Mbengue (2014)*, p.12 ("In that sense, scientific fact-finding enunciates "probabilities" while traditional fact-finding methods validate "veracities"). The various facts that are established by the trial chamber are then used to determine whether the charges are proved beyond reasonable doubt; Rome Statute, article 66(3).

¹¹¹⁵ There are various interpretations as to how the beyond reasonable doubt standard is to be applied; see for example *Lubanga* Article 74 Decision, para.180.

¹¹¹⁶ See, e.g., Award of 10 April 1905 Rendered by Colonel Macmahon as Arbitrator in Legal problems relating to the utilization and use of international rivers Report by the Secretary-General, 15 April 1963 ("After carefully calculating the normal volume of the Helmand River during the period between the autumn equinox and the spring equinox, it has been clearly ascertained that one third of the water which now reaches Seistan at Bandar-i-Kamal Khan would amply suffice for the proper irrigation of all existing cultivation in Persian Seistan, and also allow of a large future extension of that cultivation. This would leave a requisite supply for all Afghan requirements.").

more likely to be risk-averse in reaching their findings, particularly on complex technical matters. In this respect, environmental cases present a dilemma and a challenge for the traditional binary nature of fact-finding in international criminal trials. Even issues as well-studied as climate change produce a range of scientific views,¹¹¹⁷ with varying levels of certainty.¹¹¹⁸ Attempting to straight-jacket such complex issues into binary options of truth or falsehood can lead to the result being largely dictated by the operation of the burden of proof.

A concomitant question is which form of reasoning should be applied when assessing scientific evidence in environmental harm cases. Approaches vary, from the rejection of the notion that any special approach is requiring when weighing scientific evidence, to full deference to the internal logic of the particular scientific field involved.

One approach taken in public international law proceedings is to adhere to traditional legal concepts and avoid having to address complex scientific issues. The ICJ has been described as adhering to this tactic by its own members. In the *Pulp Mills* case, Judges Simma and Al-Khasawneh stated in their dissenting opinion that “the Court has an unfortunate history of persisting, when faced with sophisticated scientific and technical evidence in support of the legal claims made by States before it, in resolving these issues purely through the application of its traditional legal techniques.”¹¹¹⁹ This technique could be seen as judicial economy or else judicial evasion, depending on the observer.¹¹²⁰

The WTO Appellate Body has held that scientific findings should be evaluated according to the methodological rigor and standards of the scientific community involved.¹¹²¹ Different areas of science have different methodological rationalities. Adhering to the reasoning of the specific domain on which the legal questions centre will ensure a methodological coherence.

¹¹¹⁷ Tullio Scovazzi, “Between law and science: Some considerations inspired by the Whaling in the Antarctic judgment”, 19 April 2015, available at (<http://www.qil-qdi.org/between-law-and-science-some-considerations-inspired-by-the-whaling-in-the-antarctic-judgment-2/>).

¹¹¹⁸ See, e.g. the views of the Inter-governmental Panel on Climate Change, which appears to have adjusted its level of certainty as to the cause of climate change over the years, stating, for example, in 1995 “the balance of evidence suggests that there is a discernible human influence on global climate”, and then in 2013 “is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century”.

¹¹¹⁹ *Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, Joint Dissent of Judges Simma and Al-Khasawneh, I.C.J. Reports 2010, para. 12.

¹¹²⁰ *D'Aspremont and Mbengue (2014)*, pp.21-22.

¹¹²¹ *D'Aspremont and Mbengue (2014)*, p.41 citing Canada — Continued Suspension of Obligations in the EC — Hormones Dispute, para. 591 (WT/DS320/AB/R, WT/DS321/AB/R): (“Although the scientific basis need not represent the majority view within the scientific community, it must nevertheless have the necessary scientific and methodological rigor to be considered reputable science. In other words, while the correctness of the views need not have been accepted by the broader scientific community, the views must be considered to be legitimate science according to the standards of the relevant scientific community. A panel should also assess whether the reasoning articulated on the basis of the scientific evidence is objective and coherent.”).

At the same time, it would be seen as judicial out-sourcing of its fact-finding role.¹¹²² Problematically, this approach fails to provide an answer if the parties' experts have opposing views, which is highly likely, and neither side's experts are manifestly more reliable. In such a case, the Judge will still have to engage with the material or else find a way to avoid the scientific issue in order to reach a determination of the matter.

D. Conclusions on the ICC's procedure concerning environmental harm

The international courts have forged a new paradigm of criminal procedure, fusing elements of civil and common law proceedings into a composite model designed to have sufficient flexibility to adapt to the challenges of addressing a broad range of serious crimes.¹¹²³ With modern international criminal law still in its infancy, its procedures and regulations are still developing in many areas, and confer a relatively high level of discretion to the judges and parties to shape proceedings as best suited to redress the allegations before them. In theory, this flexibility should favour the adjudication of jurisprudentially novel areas such as environmental harm under international criminal law. However, the detailed examination set out above demonstrates that several features of the ICC's procedural framework complicate and potentially preclude the possibility of effective prosecutions of environmental harm before the Court.

Testing the feasibility of prosecuting environmental harm at the international criminal court in the absence of actual cases is a difficult exercise. Other modern international courts provide little comparative assistance, as they have not conducted any actual prosecutions for environmental harm, and the hybrid and idiosyncratic nature of the ICC procedures render it difficult to rely on comparisons with domestic courts addressing environmental harm. Nonetheless, the test of adjudicative coherence provides a means of examining, *a priori* and in the abstract, the feasibility of prosecuting environmental harm before the Court.

In relation to environmental harm, the jurisdictional and procedural framework of the ICC presents many challenges. Some, such as the lack of ready access to crime scenes, the inability of the Court to subpoena unwilling witnesses to appear before it in The Hague, and the difficulty of investigating those allied with the Government, are common to the prosecution of other crimes at the international level. Other challenges, such as obtaining evidence of long-term environmental harm, or at least awareness that such harm would

¹¹²² D'Aspremont and Mbengue (2014), p.33.

¹¹²³ Schabas (2011), p.252.

ensue,¹¹²⁴ for the purposes of article 8(2)(b)(iv), and the likely need to gather samples of and test potentially dangerous non-human bio-organic material or chemicals, for the purposes of prosecuting toxic dumping, are particularly applicable to environmental harm.

Trials for harm to the environment present a unique set of procedural challenges for international criminal law. In several respects, the existing procedural approach taken at ICC trials will need to be adjusted if trials for environmental harm *per se* are attempted. Some of the adjustments can be made within the existing confines of the Rome System instruments, whereas others may require more holistic changes going to core elements of the Court's mandated procedure, as identified in the preceding analysis.¹¹²⁵

Looking first to ICC practices that are not conducive to efficient proceedings for environmental harm, there are several aspects in which new approaches may be required. Environmental harm is inherently suited to proof by scientific evidence, meaning that the traditional eye-witness testimony based approach favoured at the ICC to date¹¹²⁶ will likely be inadequate to furnish the judges with the evidence to adjudicate the charges. To attempt to lead all such evidence through witness testimony would necessitate protracted proceedings. Efficiency mechanisms such as the introduction of witness evidence in written form under article 69(2) and rule 68 may assist to hasten proceedings, but still require cross-examination of the witness to occur in order to be considered sufficient to independently support a conviction. Similarly, the Court's lack of an international subpoena power will present an obstacle to obtaining full and frank evidence from witnesses, particularly insider witnesses, who are likely to be critical to the success of environmental cases.¹¹²⁷

Non-testimonial evidence, such as scientific tests and samples of organic and non-organic matter are likely to feature heavily in cases of environmental harm. Expert evidence is likely to also be a prevalent factor, as experienced views will be needed to analyse and explain the underlying physical evidence. To facilitate the efficient and fair introduction of large volumes of this type of evidence, a flexible approach will be needed to facilitate the volumes of expert

¹¹²⁴ See *infra* Chapter II(D)(1)(b)(v).

¹¹²⁵ See *infra* Chapter

¹¹²⁶ In the relatively brief history of international criminal law, testimonial evidence, from witnesses on the stand or else from their written statements, has tended to feature more heavily than any other type of evidence. At the ICC, this approach has continued, with the majority of the evidence being submitted through witnesses on the stand before the judges; Khan et. al. (2010), p.480-481.

¹¹²⁷ See *infra* Chapter III(C)(1)(a)(ii).

evidence required to establish the nature and causes of the damage.¹¹²⁸ On this basis, prosecuting environmental harm will require a significant adjustment to the Court's approach of heavily prioritizing and encouraging witness testimony (primarily through the principle of orality),¹¹²⁹ and the introduction of documents through testifying witnesses.

Electronic sources, such as computer records, mobile phone records, and companies' email accounts are already becoming a key means of establishing responsibility for international crimes.¹¹³⁰ Prosecutions for environmental harm will see a continuation of this trend, as investigators seek to discover and show transactions and other electronic records of the nature and extent of the harm, as well as who ordered, incited, or otherwise aided and abetted the impugned activities. Electronic sources can form a powerful means of proving charges because they capture contemporaneous communications and, unlike witnesses' memories, they are less prone to degrade or alter in content with the passage of time. However, the authentication of electronic sources can be complex.¹¹³¹ As with other areas of environmental harm, expert and technical evidence is likely to be necessary to establish the authenticity, and thus the reliability, of electronic records used as evidence to prove the nature, cause and impact of the environmental harm.

In general, proceedings involving environmental harm will be suited to an inquisitive approach.¹¹³² To date, the judiciary's involvement in information gathering during the preliminary and investigative stages of proceedings has been minimal. In light of the large volumes of technical and scientific evidence and issues that will arise during investigations and trials, such judicial non-involvement will likely result in delays and potentially a lack of appreciation of the significance of scientific and technical issues when they arise during trial proceedings.¹¹³³ Encouraging a more participatory role for the judiciary in the early stages of proceedings will enhance the prospects of focused, fair, and effective trials for environmental harm.

¹¹²⁸ See *infra* Chapter III(C)(2)(d) and (e).

¹¹²⁹ See Rome Statute, article 69(2).

¹¹³⁰ See *Prosecutor v. Ayyash et al.*, STL-11-01, Redacted Version of the Prosecution's Updated Pre-Trial Brief, 23 August 2013 (dedicating a substantial part of the case to proving the use of a network of mobile phone communications to perpetrate the crime); *Prosecutor v. Bemba et. al.*, Public Redacted Version of Judgment pursuant to Article 74 of the Statute, 19 October 2016 ("*Bemba et. al.* article 70 Case"), pp.93-103 (addressing challenges to the Western Credit Union Records and Telephone Communications that formed a significant portion of the evidence).

¹¹³¹ *Bemba et. al.* article 70 Case.

¹¹³² See *infra* Chapter III(C)(2)(a) and (c).

¹¹³³ See *infra* Chapter III(C)(1)(a)(iii).

Another feature of the Court's proceedings that straddles the line between substantive and procedural law is that of causation. The standard of causation that is ultimately required to prove environmental harm will have a profound impact on the likelihood of convictions being entered. At present, the issue of causation has not been authoritatively addressed at the ICC and remains relatively uncharted territory in relation to environmental harm.¹¹³⁴ As such, the Court still has legal space to manoeuvre when crafting its causation standards as applicable to environmental harm, and can avoid the potential pitfall of overly rigid, one-dimensional standards frustrating the possibility of any proceedings for environmental harm.

Looking to more intractable impediments to the Court addressing environmental harm, several factors have been identified herein as problematic. Longitudinal studies will frequently be necessary to establish the duration and impact of environmental harm, in terms of harm from military attacks, chemical dumps, and on wildlife species. The delays inherent in obtaining reliable information as to the duration of the environmental damage will jeopardize the Court's ability to rapidly react to serious crimes through expeditious proceedings,¹¹³⁵ and may clash with the obligation to ensure fair and expeditious proceedings.¹¹³⁶ Resource constraints of the ICC will also limit the feasibility of extensive longitudinal studies. Longitudinal environmental harm studies carried out for the Iraq Claims Commission proved expensive; the Iraqi Claims Commission awarded over 243 million USD for the initial monitoring and assessment of the environmental harm alone.¹¹³⁷ Such extensive monitoring and assessment would not be affordable at the ICC, which has an entire yearly budget for all of its operations of approximately 140 million euro.¹¹³⁸

Compounding this difficulty, the necessity of adhering to time-bound stages of proceedings requiring the Prosecution to commit itself to a certain description of the impugned environmental harm fails to address the dynamic, long-term and multi-factorial nature of

¹¹³⁴ See discussion of causation for the crime of murder in the *Katanga* article 74 Decision, para.767

¹¹³⁵ The Court has stated that it seeks to "clos[e] the time gap between events on the ground and the Office's investigations" and to ensure expeditious proceedings at all stages; International Criminal Court, Office of the Prosecutor, Strategic Plan 2016-2018, 6 July 2015, para.55.

¹¹³⁶ Rome Statute, article 64(3)(a). See also Rome Statute, article 67(1)(c) (noting the Accused's right to trial without undue delay).

¹¹³⁷ See UNCC Recommendations First Instalment (2001), para.779.

¹¹³⁸ Assembly of States Parties, Report of the Committee on Budget and Finance on the work of its twenty-sixth session, ICC-ASP/15/5, 12 July 2016, para.4.

environmental harm. It may lead to the Prosecution presenting a view of the extent and impact of the environmental harm that is inaccurate and outdated by the time the trial starts.¹¹³⁹

A second intractable problem is the number of limitations of the cooperation regime, which grants States broad leeway to frustrate the Court's investigative activities in their territories, particularly when citing national security issues.¹¹⁴⁰ While this is not a problem unique to the prospects of prosecuting environmental harm, it is particularly acute in relation to environmental harm, given the significance of access to the crime scene(s), and the need to conduct longitudinal studies to gauge the level of environmental damage and identify its causes to the extent possible.

A fundamental challenge will be posed by the usual need to determine factual allegations according to a binary standard of true or false (or unproved).¹¹⁴¹ With environmental harm, the evidence may not be suitable for such simplistic summarization, and there are likely to be many areas where experts have to use terms like the evidence "tends to show", or "most likely indicates that". How the judiciary will convert such language into legally defensible judicial findings, which can be held up against the exacting standards of international trials, particularly the beyond reasonable doubt standard, remains to be seen. Because the standard of beyond reasonable doubt is explicitly set down in the Rome Statute,¹¹⁴² the Parties orient their arguments towards that binary assessment. Expert evidence which is more naturally suited to a discussion in terms of probabilities and potential causes rather than definitive conclusions may fit awkwardly with the rigid binary standard under the Rome Statute. This will be compounded by the potential limitations of the judges' scientific training and knowledge, particularly in relation to complex matters of toxic compound chemical components or epidemiological studies of the multiple factors influencing population declines in wildlife for example.¹¹⁴³

The preceding survey shows that, in several areas, there are potential procedural blocks that could prevent efficient proceedings being conducted efficiently and effectively. Whereas some of the obstacles are created by the Court's conventional practice and could be surmounted with new interpretations of the governing instruments, others are unambiguously

¹¹³⁹ See *infra* Chapter III(C)(1)(c).

¹¹⁴⁰ See *infra* Chapter III(C)(1)(iv).

¹¹⁴¹ See *infra* Chapter III(C)(2)(b).

¹¹⁴² See Rome Statute, article 66(3).

¹¹⁴³ In this vein, see, e.g., Daniel Peat, "The Use of Court-Appointed Experts by the International Court of Justice" (2013) 84 *British Yearbook of International Law* 271.

set out in the Rome Statute and Rules of Procedure and Evidence and cannot be easily circumvented. These matters are not all exclusively relevant to environmental harm, and certain of these, such as the key role of state cooperation have featured in prior anthropocentric trials before the Court and have been, in some cases, effectively addressed. Nonetheless, these issues will import particularly destabilising consequences for environmental harm because of its dynamic, multifactorial nature, the need to access crime scenes, and the need to deal with insider witnesses.¹¹⁴⁴

The effect of these obstacles, taken jointly and severally, is likely to result in adjudicative incoherence hindering and potentially undermining proceedings for environmental harm. To avoid this potential adjudicative incoherence would require major procedural adjustments at the ICC, or else funnelling of environmental harm cases to a different institution altogether.¹¹⁴⁵

¹¹⁴⁴ See *infra* Chapter III(C)(1)(a)(ii).

¹¹⁴⁵ See Chapter V (Overall Conclusions below).