Chapter 8:
A Customary Obligation to Ensure Prompt and Adequate Compensation for Transboundary Damage?

The preceding chapters have shown that the *Nagoya–Kuala Lumpur Supplementary Protocol* is premised on the existence of a transboundary situation but only insufficiently addresses the challenges in implementing liability in such situations. The *Biodiversity Compact* can only partially mitigate this shortcoming because its membership is limited to a few biotechnology corporations, it only applies to biodiversity damage, and only states – not individuals – can make claims.

Besides these instruments, however, it has been argued that there is a general obligation of states under customary international law to ensure the prompt and adequate compensation of foreign victims of transboundary damage.[1] This approach is also reflected in the *Principles on the Allocation of Loss in the Case of Transboundary Harm Arising out of Hazardous Activities* adopted by the International Law Commission (ILC) in 2006.[2] The Principles concluded the work of the ILC on the topic of 'liability for the injurious consequences of acts not prohibited by international law', which had been on the Commission's agenda since the late 1970s.[3] Due to the persistent controversy over the role of state liability,[4] the ILC decided in 1997 to treat the topics of prevention and liability separately.

---

1 Cf. *René Lefeber*, Transboundary Environmental Interference and the Origin of State Liability (1996), 229–299.

2 ILC, Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising Out of Hazardous Activities, with Commentaries (2006), YBILC 2006, vol. II(2), p. 56 (hereinafter 'ILC, Allocation of Loss Principles'). See generally *Alan E. Boyle*, Globalising Environmental Liability: The Interplay of National and International Law, 17 (2005) J. Envt'l L. 3, 16–17; *Caroline E. Foster*, The ILC Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising Out of Hazardous Activities, 14 (2005) RECIEL 265, 267–270; *Alan E. Boyle*, Liability for Injurious Consequences of Acts Not Prohibited by International Law, in: James Crawford/Alain Pellet/Simon Olleson (eds.), The Law of International Responsibility (2010) 95, 95–97; *Julio Barboza*, The Environment, Risk and Liability in International Law (2011), 129–132.

3 For accounts of the development of the issue in the ILC, see *Boyle* (n. 2), 95–97; *Barboza* (n. 2), 73–152.

4 See chapter 10, section D.

Thus, the Principles on Allocation of Loss complement the *Articles on Prevention of Transboundary Harm* of 2001, which left the issues of liability and reparation unaddressed.[5]

The Principles apply to transboundary damage caused by hazardous activities not prohibited by international law (A.). Their stated purpose is two-fold. On the one hand, they seek to ensure 'prompt and adequate compensation' to victims of transboundary damage (B.). On the other hand, they aim to 'preserve and protect the environment' in cases of such damage, especially by ensuring the mitigation of damage to the environment and its restoration or reinstatement (C.).[6] Hence, the Principles recognize that different approaches are needed to compensate injury to individuals and remediate damage to the environment *per se*.[7] To implement these approaches, states shall provide adequate administrative and legal remedies (D.). The Principles envisage operator liability and, therefore, complement the law of state responsibility (E.). In conclusion, it is argued here that the Allocation of Loss Principles have a 'customary core' that is already binding upon states (F.).

A. Scope of Application and Use of Terms

The Principles stipulate that they apply to 'transboundary damage caused by hazardous activities not prohibited by international law'.[8] The ILC's commentary notes that the Principles are intended to have the same scope of application as the *Articles on Prevention*.[9] Consequently, in line with the definition of 'harm' in the latter, the Principles define the term 'damage' as 'damage caused to persons, property or the environment'.[10]

---

5 Cf. ILC, Draft Articles on Prevention of Transboundary Harm from Hazardous Activities, with Commentaries (2001), YBILC 2001, vol. II(2), p. 148 (hereinafter 'ILC, Articles on Prevention'); see chapter 4.

6 ILC, Allocation of Loss Principles (n. 2), Principle 3.

7 See UNEP, Guidelines for the Development of Domestic Legislation on Liability, Response Action and Compensation for Damage Caused by Activities Dangerous to the Environment: Annex to Governing Council Decision SS.XI/5 B, UN Doc. A/26/25, p. 16 (2010), which also combine administrative liability for environmental damage and civil liability principles for traditional damage. For an analysis of the UNEP Guidelines, see *Amy Hindman/René Lefeber*, International/Civil Liability and Compensation, 21 (2010) YB Int'l Env. L. 178, 179–181.

8 ILC, Allocation of Loss Principles (n. 2), Principle 1.

9 *Ibid.*, Commentary to Principle 1, para. 1.

10 On the use of the terms 'harm' and 'damage', see chapter 4, section B.I.

The 'environment' is broadly defined as including both biotic and abiotic natural resources and their interaction, as well as 'the characteristic aspects of the landscape'.[11] 'Environmental damage' includes not only the costs of reasonable response and reinstatement measures but also 'loss or damage by impairment of the environment'. The commentary notes that this refers to damage to the environment *per se*, which includes loss of income derived from economic use of the environment,[12] but may also extend to the loss of 'non-use value' of the environment.[13] The ILC apparently saw fewer problems in the general compensability of such damage than in the question of who should have standing to make appropriate claims.[14]

The Principles apply to '*transboundary* damage', which is defined as 'damage caused to persons, property and the environment in the territory or other places under the jurisdiction or control of a State other than the State of origin'.[15] Hence, the Principles do not address damage to the areas beyond the limits of national jurisdiction or 'global commons'. The ILC assumed that such damage, as well as harm from multiple sources, had 'their own particular features' and therefore required 'separate treatment'.[16] While this aligns the scope of the Principles with that of the ILC's Articles on Prevention,[17] some of the principles could nevertheless be applied to damage to global commons, such as the obligation to ensure that appropriate response measures are taken.[18]

Like in the Prevention Articles, the term 'hazardous activity' is defined as 'an activity that involves a risk of causing significant harm'.[19] While this clearly applies to activities that were identified as hazardous before damage occurred,[20] it is questionable whether it also includes cases in which the

11 ILC, Allocation of Loss Principles (n. 2), Principle 2(b).
12 *Ibid.*, Commentary to Principle 2, para. 13.
13 *Ibid.*, Commentary to Principle 2, para. 18; see *Barboza* (n. 2), 134–135.
14 Cf. ILC, Allocation of Loss Principles (n. 2), Commentary to Principle 2, para. 14; see *Barboza* (n. 2), 136–137. On the compensability of 'pure' environmental damage, see chapter 11, section B.I.
15 ILC, Allocation of Loss Principles (n. 2), Principle 2(e).
16 Cf. ILC, Report of the Commission to the General Assembly on the Work of Its Fifty-Fourth Session, YBILC 2002, vol. II(2) (2002), para. 447; ILC, Allocation of Loss Principles (n. 2), General commentary, para. 7.
17 Cf. ILC, Articles on Prevention (n. 5), Article 2(c).
18 Cf. ILC, Allocation of Loss Principles (n. 2), Principle 5(b).
19 *Ibid.*, Principle 2(c). On the element of 'risk', see chapter 4, section B.V.
20 As shown in chapter 4, section B.VII, the development and release of LMOs can, in principle, constitute hazardous activities.

harm was not foreseeable.[21] While state responsibility for transboundary harm requires a breach of *due diligence*, which presupposes that the harm was (at least objectively) foreseeable,[22] it could be argued that obligations concerning the allocation of loss arise regardless of a legal wrongdoing and are therefore independent of the question of whether the damage could have been foreseen (or indeed avoided). But it should also be kept in mind that the precautionary principle requires a diligent approach once there are indications, albeit no proof, of a risk of harm.[23] Therefore, human activities rarely result in completely unforeseen damage, which would arguably come close to a case of *force majeure*. But even force majeure does not relieve a state of its international responsibility vis-à-vis the injured state(s).[24] Thus, the issue of allocation of loss is not generally void simply because the damage was not foreseeable to the state of origin. This is also recognized in the commentary to the Principles, which notes that the ILC did not include a test of 'foreseeability' or 'proximate cause' of damage, since it considered this to be 'a highly discretionary and unpredictable branch of law' and thus not adequately addressed by a general model on loss allocation.[25]

B. Requirement to Ensure Prompt and Adequate Compensation

Principle 4(1) stipulates that each state should take all necessary measures to ensure that 'prompt and adequate compensation is available for victims of transboundary damage'. The commentary explains that this principle 'responds to and reflects a growing demand and consensus in the international community' that states are expected, when they permit hazardous activities, to make sure that adequate mechanisms are available to respond to claims for compensation in case of any damage.[26] The commentary also observes that 'some commentators regard this as a customary law obligation'.[27] Indeed, the general principle that states shall ensure that foreign

21 Cf. *Boyle* (n. 2), 17; *Foster* (n. 2), 270.
22 See chapter 4, section B.VI.
23 See *ibid.*
24 See chapter 9, section A.IV.6.
25 ILC, Allocation of Loss Principles (n. 2), Commentary to Article 4, para. 16.
26 *Ibid.*, Commentary to Principle 4, para. 3.
27 *Ibid.*, Commentary to Principle 4, para. 6, citing *Peter-Tobias Stoll*, Transboundary Pollution, in: Fred L. Morrison/Rüdiger Wolfrum (eds.), International, Regional, and National Environmental Law (2000) 169, 169–175.

victims of transboundary harm caused by activities under their jurisdiction do not remain uncompensated seems to be no longer controversial.[28]

I. The Standard of 'Prompt and Adequate' Compensation

According to the ILC's commentary, the notion of prompt and adequate compensation 'reflects the understanding and the desire that victims of transboundary damage should not have to wait long in order to be compensated'.[29] The standard of *promptness* is defined as 'procedures that would govern access to justice, and that would influence the time and duration for the rendering of decisions on compensation payable in a given case'.[30] The commentary also notes that litigation in domestic courts over compensation claims can be 'costly and protracted over several years'.[31] Nevertheless, the commentary does not indicate a time span that would be regarded as fulfilling the standard of promptness.

As to the requirement that compensation shall be *adequate*, the ILC does not provide any substantive criteria either. It notes that adequate compensation could be either determined by way of lump-sum agreements or through litigation in the domestic courts of the state of origin. The commentary even assumes that compensation was '*ipso facto* adequate' as long as due process requirements are met and the compensation given is not arbitrary or 'grossly disproportionate to the damage actually suffered'.[32] At the same time, the ILC assumed that compensation need neither be full nor sufficient to be regarded as adequate.[33] This takes into account that most existing international liability treaties allow for the application of limits or caps to liabilityin order to, *inter alia*, ensure the 'insurability' of the risk.[34]

---

28 See ILC, International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law: Comments and Observations Received from Governments, YBILC 2006, vol. II(1), p. 89 (2006); *Pemmaraju S. Rao*, Third Report on the Legal Regime for the Allocation of Loss in Case of Transboundary Harm Arising Out of Hazardous Activities, UN Doc. A/CN.4/566 (2006), 3(e).

29 ILC, Allocation of Loss Principles (n. 2), Commentary to Principle 3, para. 3.

30 *Ibid.*, Commentary to Principle 4, para. 7.

31 *Ibid.*

32 *Ibid.*, Commentary to Article 4, para. 8.

33 *Ibid.*

34 Cf. *ibid.*, Commentary to Article 4, para. 19–23; see, e.g., International Convention on Civil Liability for Oil Pollution Damage (29 November 1969; effective 19 June 1975), 973 UNTS 3, as amended by the Protocol of 27 November 1992

II. Imposition of Strict Operator Liability

Principle 4(2) provides that measures to ensure prompt and adequate compensation should include the imposition of strict liability on the 'operator', which is defined as 'any person in command or control of the activity at the time the incident causing transboundary damage occurs'.[35] Besides the operator, the Principles also allow the imposition of liability on another person or entity, where appropriate. According to the commentary, the 'real underlying principle is not that "operators" are always liable, but that the party with the most effective control of the risk at the time of the accident or with the ability to provide compensation is made primarily liable'.[36] Hence, while the Principles suggest that liability should be 'channelled' to one particular actor,[37] they offer no conclusive guidance on how this actor shall be identified. Hence, the Principles remain vague like the *Nagoya – Kuala Lumpur Supplementary Protocol*, which provides that any person in direct or indirect control of an LMO could be regarded as an operator.[38] As shown earlier, determining the responsible operator can be particularly difficult in cases of damage caused by LMOs, since it may be impossible to identify a single incident that has given rise to the damage, especially in situations of *slow-onset damage* that occurs long after it has been caused.[39] The ILC's commentary merely acknowledges that the looser and less concrete the link between the incident in question

---

(effective 30 May 1996), 1956 UNTS 255, Article V; Convention on Limitation of Liability for Maritime Claims (19 November 1976; effective 01 December 1986), 1456 UNTS 221, as amended by the Protocol of 2 May 1996 (effective 13 May 2004), RMC I.2.340 II.2.340; Vienna Convention on Civil Liability for Nuclear Damage (25 May 1963; effective 12 September 1997), 1063 UNTS 358, as amended by the Protocol of 12 September 1997 (effective 4 October 2003), IAEA Doc. INFCIRC/566, Article V; also see ILC, Survey of Liability Regimes Relevant to the Topic of International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law (International Liability in Case of Loss from Transboundary Harm Arising Out of Hazardous Activities): Prepared by the Secretariat, UN Doc. A/CN.4/543 (2004), paras. 605–622.

35 ILC, Allocation of Loss Principles (n. 2), Principle 2(g).

36 *Ibid.*, Commentary to Principle 4, para. 10.

37 On the issue of 'channelling', see *Hanqin Xue*, Transboundary Damage in International Law (2003), 80–86.

38 Nagoya-Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety (15 October 2010; effective 05 March 2018), UN Doc. UNEP/CBD/BS/COP-MOP/5/17, p. 64 (hereinafter 'Supplementary Protocol'), Article 2(2)(c).

39 See chapter 6, section C.II.

and the damage claimed, the less certain the right to compensation.[40] But at the same time, the option to impose liability on appropriate persons other than the operator might allow a distinction between liability for 'development risks' and liability for inappropriate handling or use of an LMO.[41] Yet, since the Principles are confined to liability for transboundary damage,[42] it appears difficult to argue that they include an obligation of third states to provide for liability of developers or producers situated in their jurisdiction. As noted earlier, such situations fall outside the remit of international environmental law,[43] and transnational product liability would need to be ensured by commercial agreements.[44]

Principle 4(2) also provides that liability 'should not require proof of fault'. As noted above, many legal systems provide for 'strict liability' for damage caused by certain hazardous or dangerous activities to allocate the risk to those persons who derive benefit from a particular activity.[45] But the commentary also notes that strict liability does not eliminate the difficulties that can be involved in establishing the necessary causal link between the damage and its source.[46] Moreover, Principle 4(2) provides that any conditions, limitations or exceptions to liability shall be consistent with the overarching objective of the Principles of ensuring adequate compensation. Arguably, the extent to which limitations are acceptable may also depend on the availability of supplementary funding.[47]

III. Compensation Funding

Principle 4(3) stipulates that operators should be required to establish and maintain financial security, such as insurance, bonds or other financial guarantees. This is a common feature of many liability instruments

40 ILC, Allocation of Loss Principles (n. 2), Commentary to Principle 2, para. 34.
41 See *Boyle* (n. 2), 21.
42 See *supra* section A.
43 See chapter 4, section B.III.
44 See generally *Albert A. Ehrenzweig*, Products Liability in the Conflict of Laws–Toward a Theory of Enterprise Liability Under Foreseeable and Insurable Laws, 69 (1960) Yale L.J. 794. Also see Convention on the Law Applicable to Products Liability (02 October 1973; effective 01 October 1977), 1056 UNTS 187, which addresses choice of law issues but not jurisdiction or recognition and enforcement of judgments.
45 Cf. ILC, Survey of liability regimes (n. 34), paras. 29–112; see chapter 2, section E.
46 ILC, Allocation of Loss Principles (n. 2), Commentary to Article 4, para. 16.
47 Cf. *Boyle* (n. 2), 21.

because it ensures that the operator is actually able to meet claims of compensation in the event of damage.[48] Besides, Principle 4(4) provides that states should require the establishment of industry-wide funds at the national level in appropriate cases.[49] Moreover, Principle 4(5) maintains the idea that there could be an obligation on states to provide for subsidiary or supplementary compensation.[50] In the event that the aforementioned measures are insufficient to provide for adequate compensation, the state of origin 'should ensure that additional financial resources are made available'.[51] But the commentary also notes that these options are only indicative, and that states may choose between these options in accordance with their particular circumstances.[52] Thus, once again, states are free to choose their means as long as they succeed in ensuring 'prompt and adequate compensation' for victims of transboundary harm.[53]

C. *Obligation to Provide for Response Measures*

Principle 5 addresses the implementation of response measures. Although the Principles do not define what is meant by 'response measures', Principle 3(b) indicates that their purpose is the 'mitigation of damage to the environment and its restoration or reinstatement'. Thus, in line with other international instruments providing for response measures,[54] the Principles envisage that measures are taken both to prevent (further) damage and to remediate the damage that has already materialized.[55] The commentary notes that response measures should not only include clean-up and restoration measures within the jurisdiction of the state of origin, but also extend to containing the geographical range of the damage to prevent

48 See ILC, Survey of liability regimes (n. 34), paras. 690–708.
49 ILC, Allocation of Loss Principles (n. 2), Principle 4(4).
50 See chapter 10.
51 ILC, Allocation of Loss Principles (n. 2), Principle 4(5); see *Foster* (n. 2), 267–277.
52 ILC, Allocation of Loss Principles (n. 2), Commentary to Principle 4, para. 39.
53 Cf. *Boyle* (n. 2), 102–103.
54 See Directive 2004/35/CE on Environmental Liability with Regard to the Prevention and Remedying of Environmental Damage (21 April 2004), OJ L 143, p. 56, Article 2(10) and (11), and Annex II; Annex VI to the Protocol on Environmental Protection to the Antarctic Treaty: Liability Arising from Environmental Emergencies (14 June 2005; not yet in force), ATCM Measure 1 (2005), Article 2(f); Supplementary Protocol (n. 38), Article 2(2)(d).
55 *Barboza* (n. 2), 147.

it from becoming transboundary if this is still possible.[56] Moreover, the state of origin must notify the states affected or likely to be affected.[57] As shown above, these obligations are already established as binding rules of customary international law.[58]

Besides the state of origin, the affected states shall also take all feasible measures to mitigate the damage they are exposed to and, if possible, eliminate the effects of such damage.[59] This approach is convincing, considering that the law of territorial sovereignty prevents the state of origin from implementing response measures in the territory of another state without the latter's consent. Nevertheless, the provision is innovative since it imposes a responsibility on the 'innocent victim state' to address environmental damage occurring in its territory but caused by foreign sources. At the same time, the affected state shall not bear the material burden of implementing response measures, as the costs of 'reasonable response measures' are expressly included in the heads of compensable damage.[60] Hence, the party that is ultimately liable must also bear the cost of such measures, thereby 'becoming part of compensation'.[61] But the ILC's commentary also notes that expenditures should not be disproportionate and that the aim was not to restore or return the environment to its original state but to enable it to maintain its permanent functions.[62]

Principle 5 also stipulates that the state of origin should, as appropriate, consult with and seek the cooperation of all states affected or likely to be affected.[63] Besides, the states concerned should seek the assistance of competent international organizations or other states, 'where appropriate' and 'on mutually acceptable terms and conditions'.[64] Arguably, these principles are expressions of policy rather than legal rules. At the same time, special regimes may provide for more stringent obligations. For instance, parties to the *Cartagena Protocol on Biosafety* are required to notify uninten-

56 ILC, Allocation of Loss Principles (n. 2), Commentary to Principle 5, para. 1.
57 Cf. *ibid.*, Priciple 5(a).
58 See chapter 4, section D.VI.
59 ILC, Allocation of Loss Principles (n. 2), Principle 5(d) and commentary thereto, para. 10.
60 *Ibid.*, Principle 2(a)(v) and commentary thereto, para. 17.
61 *Barboza* (n. 2), 148.
62 ILC, Allocation of Loss Principles (n. 2), Commentary to Principle 3, para. 7; see chapter 11.
63 *Ibid.*, Principle 5(d).
64 *Ibid.*, Principle 5(e).

tional or illegal transboundary movements of Living Modified Organisms to the *Biosafety Clearing-House* established under the Protocol.[65]

D. Obligation to Provide for International and Domestic Remedies

Principle 6 addresses the procedural measures expected from a state to ensure prompt and adequate compensation of foreign victims of transboundary damage. The underlying idea is that the state of origin should provide such victims with non-discriminatory access to justice within the national legal system of the state of origin.[66] As shown above, there are no internationally harmonized rules on the choice of forum, applicable law, and recognition and enforcement of judgments in cases of transboundary damage, which means that the victims will mostly have to seek legal remedies in the state of origin.[67] Therefore, Principle 6(2) provides that victims of transboundary damage should have access to remedies in the state of origin that are no less prompt, adequate and effective than those available to victims that suffer damage from the same incident within the territory of that state.[68] The right to non-discriminatory remedies in national law has already been recognized in a number of international agreements, including the 1982 *Law of the Sea Convention*,[69] the 1992 *Rio Declaration*,[70]

65 Cf. Cartagena Protocol on Biosafety to the Convention on Biological Diversity (29 January 2000; effective 11 September 2003), 2226 UNTS 208, Articles 17(1) CP and 25(3); see chapter 3, section A.II.2.b).

66 ILC, Allocation of Loss Principles (n. 2), Commentary to Principle 6, para. 1; *Barboza* (n. 2), 148.

67 See chapter 2, section F.

68 ILC, Allocation of Loss Principles (n. 2), Principle 6(2).

69 Cf. United Nations Convention on the Law of the Sea (10 December 1982; effective 16 November 1994), 1833 UNTS 3, Article 235(2); see *Tim Stephens*, Article 235 UNCLOS, in: Alexander Proelss (ed.), United Nations Convention on the Law of the Sea: A Commentary (2017), MN. 18–21.

70 Cf. Rio Declaration on Environment and Development (14 June 1992), UN Doc. A/CONF.151/26/Rev.1 (Vol. I), Principle 10, which reads: 'Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.'

the 1997 *Watercourses Convention*,[71] and the 2001 *Articles on Prevention* of the ILC.[72]

However, non-discriminatory access to justice does not provide prompt and adequate remedies as long as a state awards its own nationals no adequate level of protection.[73] For this reason, Principle 6(1) stipulates that states shall provide their domestic judicial and administrative bodies with the necessary jurisdiction and competence and ensure that these bodies have 'prompt, adequate and effective remedies' available in the event of transboundary damage.[74] States should also guarantee appropriate access to information relevant to the pursuance of such remedies.[75] Moreover, the provision of adequate remedies shall be without prejudice to the right of victims to seek remedies other than those available in the state of origin.[76] This allows for so-called 'forum shopping', which is justified in the case at hand because it allows victims of transboundary harm to seek legal remedies in the most suitable jurisdiction – be it for legal reasons or because assets of the defendant are situated there.[77]

E. Relationship to the Law of State Responsibility

The preamble to the Principles on Allocation of Loss notes that 'States are responsible for infringements of their obligations of prevention under international law'.[78] The ILC's commentary adds that the Principles are 'without prejudice to the rules relating to State responsibility and any claim that may lie under those rules in the event of a breach of the obliga-

71 Cf. Convention on the Law of the Non-Navigational Uses of International Watercourses (21 May 1997; effective 17 August 2014), UN Doc. A/RES/51/229, Article 32, which provides that states should not discriminate persons affected by significant transboundary harm on the basis of nationality, residence, or place where the injury occurred, in granting them access to judicial or other procedures to claim compensation.

72 ILC, Articles on Prevention (n. 5), Article 15.

73 *Barboza* (n. 2), 148.

74 ILC, Allocation of Loss Principles (n. 2), Principle 6(1).

75 *Ibid.*, Principle 6(5); also see chapter 4, section D.V.

76 *Ibid.*, Principle 6(3).

77 Cf. *Boyle* (n. 2), 9–10; ILC, Allocation of Loss Principles (n. 2), Commentary to Principle 6, para. 8; *André Nollkaemper*, Cluster-Litigation in Cases of Transboundary Environmental Harm, in: Michael G. Faure/Ying Song (eds.), China and International Environmental Liability (2008) 11, 14–16.

78 ILC, Allocation of Loss Principles (n. 2), Preamble, recital 7.

tions of prevention'.[79] Although it is assumed for the purposes of the Principles that the state of origin has complied with its preventive obligations and is therefore not internationally responsible for transboundary damage, cases in which the state of origin has *not* complied with these obligations are not generally excluded from their scope. The commentary notes that 'the non-fulfilment of the duty of prevention […] could engage State responsibility without necessarily giving rise to the implication that the activity itself is prohibited' and thus falls outside the Principles' scope.[80]

Hence, the ILC envisaged civil liability under the Principles and the law of state responsibility as potentially complementary regimes.[81] A state could be internationally responsible for having failed to prevent transboundary damage (and would thus be obliged to make reparation under the law of state responsibility) and, additionally, be required to ensure prompt and adequate compensation in line with the Allocation of Loss Principles.[82] This could potentially lead to double recovery of the same damage. Therefore, claims on the intergovernmental level could be barred by the so-called *local remedies rule* as long as victims of transboundary damage have not sought to obtain compensation through the domestic remedies available in the state of origin.[83] However, as shown below, it is questionable whether this rule applies in cases of transboundary damage.[84]

79 *Ibid.*, General commentary, para. 6.
80 *Ibid.*, Commentary to Article 1, para. 6.
81 *Foster* (n. 2), 269; *Boyle* (n. 2), 99.
82 See ILC, Allocation of Loss Principles (n. 2), Commentary to Principle 1, para. 6, which notes that '[i]n such a case, State responsibility could be invoked to implement not only the obligations of the State itself but also the civil responsibility or duty of the operator.' But this appears to confuse the origins of state responsibility and civil liability: While the obligation to make reparation under the law of state responsibility is a *secondary obligation* that follows from a breach of a *primary obligation* (namely, the failure to prevent transboundary harm), the obligation to provide for civil liability of the operator is a separate *primary obligation* that exists independently from a breach of preventive obligations. Notably, a failure to provide for civil liability could *by itself* result in a breach of international law and thus entail (*secondary*) obligations to make reparation.
83 Cf. ILC, Draft Articles on Diplomatic Protection with Commentaries (2006), YBILC 2006, Vol. II(2), p. 26, Article 14; see *Foster* (n. 2), 268–269.
84 See chapter 9, section C.II.2.

F. Legal Status: Emerging Customary International Law?

In its commentary, the ILC described the Allocation of Loss Principles as 'a non-binding declaration of draft principles',[85] which 'did not attempt to identify the current status of […] customary international law'.[86] Moreover, the ILC noted that 'recommended draft principles would have the advantage of not requiring a harmonization of national laws and legal systems, which is fraught with difficulties'.[87] Hence, the Commission seemingly wanted to avoid developing another binding instrument on liability that would have likely suffered the same fate as many previous instruments and failed to attract enough ratifications to enter into force.[88] But this raises the question of why the ILC adopted principles at all on a topic where states persistently refuse to accept international harmonization.[89] One could even argue that the ILC attempted to undertake progressive development of international law in a direction that had already proven to be a dead end.[90]

However, there is a notable difference between earlier instruments and the ILC's Allocation of Loss Principles: while the former attempted to provide more or less harmonized rules on the substantive content of liability as well as the related procedural aspects,[91] the Principles only stipulate the desired result, namely the provision of prompt and adequate compensation to victims of transboundary damage. They do not seek to impose a particular standard of liability (but merely provide that 'liability should not require proof of fault'[92]) and do not require the mutual recognition and enforcement of foreign judgments, which are both issues that may be difficult to integrate into existing legal orders.[93] Instead, it is left to the states *how* they ensure prompt and adequate compensation and effective and non-discriminatory remedies, provided that they meet these objectives.

---

85 ILC, Allocation of Loss Principles (n. 2), General commentary, para. 11.
86 *Ibid.*, General commentary, para. 13.
87 *Ibid.*, General commentary, para. 12.
88 Cf. *Foster* (n. 2), 273; see *Anne Daniel*, Civil Liability Regimes as a Complement to Multilateral Environmental Agreements, 12 (2003) RECIEL 225.
89 See *Boyle* (n. 2), 25–26.
90 This seems to be the underlying assumption by *Jutta Brunnée*, Of Sense and Sensibility: Reflections on International Liability Regimes as Tools for Environmental Protection, 53 (2004) ICLQ 351, 355–356.
91 See ILC, Survey of liability regimes (n. 34).
92 ILC, Allocation of Loss Principles (n. 2), Principle 4(2); see chapter 2, section E.
93 See *Daniel* (n. 88), 236–237.

Besides, the Principles take a different approach to damage to the environment *per se*: by providing for the implementation of response measures rather than monetary compensation, the Principles reflect the approach taken by the more recent liability instruments, including the *Nagoya – Kuala Lumpur Supplementary Protocol*.[94] As shown further below, reimbursement of the costs incurred in taking 'reasonable response measures' is widely recognized in both state practice and international treaties.[95]

The question remains whether – and if so, to what extent – the ILC's Principles on Allocation of Loss already reflect customary international law. While some governments and scholarly authors have questioned[96] or clearly denied[97] the customary status of the ILC's Principles, others have argued that the obligation to ensure prompt and adequate compensation is already established in customary international law[98] or at least represents 'emerging international law'.[99] In any event, accepting the existence of a general obligation to ensure prompt and adequate compensation is the only way to reconcile the repeated recognition by states that transboundary damage should not be left unaddressed with their persistent refusal to accept strict state liability where they are not internationally responsible for the damage.[100] Apparently, this view was also shared by the majority

94 See chapter 2, section G, and chapter 6, section C.
95 See chapter 11, section A.
96 Cf. *Foster* (n. 2), 276–277.
97 See the comments by the United Kingdom and by the United States, in: ILC, Comments by Governments on the 2004 draft of the Allocation of Loss Principles (n. 28), 93; also see *Barbara Saxler* et al., International Liability for Transboundary Damage Arising from Stratospheric Aerosol Injections, 7 (2015) Law, Innovation and Technology 112, 130.
98 Cf. *Lefeber* (n. 1), 229–299, arguing in favour of a customary obligation to ensure prompt, adequate and effective compensation; but see *René Lefeber*, The Legal Significance of the Supplementary Protocol: The Result of a Paradigm Evolution, in: Akiho Shibata (ed.), International Liability Regime for Biodiversity Damage (2014) 73, 86, assuming the 'it cannot be said that a customary obligation of States has yet emerged to ensure prompt, adequate and effective response measures in case of environmental loss or threat of such loss'; also cf. *Boyle* (n. 2), 19; *Boyle* (n. 2), 100–101; moreover, see the comment by the Netherlands, the Czech Republic, and Mexico, in ILC, Comments by Governments on the 2004 draft of the Allocation of Loss Principles (n. 28).
99 Cf. *Nollkaemper* (n. 77), 16. No government expressly argued that the Principles represented already-binding customary international law, cf. ILC, Comments by Governments on the 2004 draft of the Allocation of Loss Principles (n. 28).
100 See chapter 10.

of states that offered comments on the 2004 draft of the Principles.[101] As aptly summarized by the ILC's Special Rapporteur on the topic,

> *'it is regarded as no longer acceptable under international law for a State to authorize a hazardous activity within its territory with a risk of causing transboundary harm and not have legislation in place which guarantees suitable remedies and compensation in case of an incident causing transboundary damage'.*[102]

Hence, although there may be disagreement about the extent to which the Principles elaborated by the ILC represent already-established customary international law, it can be assumed that the Principles have a 'customary core'. When activities under their jurisdiction cause transboundary harm, states must ensure that foreign victims have access to non-discriminatory remedies and can obtain prompt and adequate compensation. States must also take response measures to prevent and mitigate further damage, including by notifying and cooperating with all other states likely to be affected. This is also reflected in Principles 5 and 6(1) which, unlike the 2004 draft,[103] are now cast in obligatory terms: they provide that states 'shall' – and not only 'should' – provide for response measures and adequate remedies.[104]

Notably, the obligation to implement response measures is confined to the territory of each state; the state of origin is neither required nor generally allowed to take response measures in the territory of affected states.[105] Affected states, on their part, do not bear an obligation to take response measures under general customary international law,[106] although such an

101 Cf. ILC, Comments by Governments on the 2004 draft of the Allocation of Loss Principles (n. 28); see ILC, Text of Draft Principles on the Allocation of Loss in the Case of Transboundary Harm Arising Out of Hazardous Activities Adopted by the Commission on First Reading, YBILC 2004, vol. II(2), para. 175 (2004).

102 *Rao* (n. 28), para. 3(e).

103 See ILC, Draft Principles on Allocation of Loss as adopted on first reading (2004) (n. 101).

104 Cf. *Rao* (n. 28), para. 44, defending the format of cast principles but also noting that 'the Commission may give some serious consideration to reflecting the basic obligation on the duty to pay compensation and the right to seek remedies in language that is more prescriptive'. Also see *Boyle* (n. 2), 19; *Foster* (n. 2), 280–281; *Boyle* (n. 2), 99; *Barboza* (n. 2), 150–151.

105 See *supra* section C.

106 But see ICJ, Gabčíkovo-Nagymaros Project (Hungary v. Slovakia), Judgment of 25 September 1997, ICJ Rep. 7, para. 80, noting that 'an injured State which has failed to take the necessary measures to limit the damage sustained would

obligation might well arise from international treaties. For instance, if a self-spreading LMO exceeds its intended target range and becomes an 'invasive alien species' threatening biodiversity, almost all states are required by Article 8(h) of the CBD to control and eradicate that species.[107] If an affected state takes reasonable mitigation and reinstatement measures, the expenses incurred in doing so become part of the damage for which the state of origin must ensure prompt, adequate and effective remedies under its domestic legal system.[108]

not be entitled to claim compensation for that damage which could have been avoided'.

107 See chapter 3, section B.V.

108 ILC, Allocation of Loss Principles (n. 2), Principle 2(a)(v) and commentary thereto, para. 17; commentary to Principle 5, para. 10; see chapter 11, section A.