The Nagoya–Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety: An analysis and implementation challenges

Gurdial Singh Nijar

Abstract The Nagoya–Kuala Lumpur Supplementary Protocol on Liability and Redress was finally adopted on 15 October 2010 at Nagoya, Japan. It was negotiated pursuant to a mandate established by the First Conference of the Parties serving as the Meeting of the Parties in 2004 under an enabling provision in the Cartagena Biosafety Protocol. The Supplementary Protocol seeks to deal with damage to biodiversity as well as ‘associated’ traditional material or personal damage. It delineates two pathways to dealing with such damage: the administrative approach that empowers a competent authority to deal with the matter administratively, without initial recourse to courts; and a civil liability approach that requires litigants to seek private law remedies through national legal systems. However, while the Supplementary Protocol has elaborate and comprehensive provisions implementing the administrative approach, it incorporates only a single article on civil liability which does little more than exhort parties to continue to apply their existing domestic law on the subject or establish rules to deal specifically with the matter. This was not the outcome anticipated when the negotiations started. It was the expectation, primarily of developing countries then, that the prospective protocol would deal essentially with civil liability and set out substantive and procedural rules on liability and redress. This article traces how and why all this came to pass. It also analyses the provisions, and the implications, relating to the administrative approach and the single enabling article on civil liability. It deals also with the challenges in implementing the administrative approach, novel to most countries. Finally, it examines the prospect for the emergence in the future of a more elaborate international civil liability regime.

Keywords Liability and redress · Damage · Living modified organisms · Transboundary movements · Administrative approach · Civil liability

G. S. Nijar (✉)
Law Faculty, Universiti Malaya, 50603 Kuala Lumpur, Malaysia
e-mail: director.ceblaw@um.edu.my; ceblaw@um.edu.my; nijar46@hotmail.com

G. S. Nijar
Centre of Excellence for Biodiversity Law, Kuala Lumpur, Malaysia

Published online: 01 August 2012
Abbreviations
CBD Convention on biological diversity
CEP Core elements paper
CPB Cartagena Protocol on Biosafety
COP/MOP Conference of the Parties serving as a Meeting of the Parties
EU European Union
FOCC Friends of the Co-Chairs
GRULAC Group of Latin American and Caribbean Countries
LMO Living modified organism
N–KL Nagoya–Kuala Lumpur
TEG Technical expert group
WG Ad Hoc Open-ended Working Group of Legal and Technical Experts on Liability and Redress

1 Introduction

The Cartagena Protocol on Biosafety (CPB) was concluded in 2000. It was negotiated under Article 19 of the Convention on Biological Diversity (CBD) and provides an international regulatory framework for the ‘safe transfer, handling and use of any living modified organism (LMO) resulting from biotechnology that may have an adverse effect on the conservation and sustainable use of biological diversity’. The protocol sought to reconcile the economic interest of the then burgeoning biotechnology industry and environmental concerns. The negotiations leading to the birth of the protocol were long and difficult. As a result, it was not possible to address the issue of liability and redress for damage arising from such LMOs. Instead, it was agreed to include an enabling clause (Article 27) that required parties to establish a process to negotiate international rules and procedures to deal with any such damage (Secretariat, Convention on Biological Diversity 2003). The process was established at the first Conference of the Parties to the Convention on Biological Diversity serving as the Meeting of the Parties under the CPB (COP/MOP1) in 2004 (Secretariat, Convention on Biological Diversity 2004). The outcome, after 6 years of intense negotiations, was the adoption in 2010 of the Nagoya–Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety (the N–KL Protocol or the Protocol). The declared objective of the N–KL Protocol is to prevent and remedy damage to biodiversity caused by LMOs that have their origin in a transboundary movement. It adopts a two-pronged approach: administrative and civil liability. There are elaborate and comprehensive provisions with regard to the former; the latter is dealt with by a single article that essentially requires parties to apply or adapt their existing national civil liability law or enact a specific law on the matter. This article analyses the provisions in the N–KL Protocol with regard to both these approaches and their implications. It also narrates the negotiating history that led to this outcome. Finally, it presents some ideas on the way forward to correct this imbalance.

2 Scope

The Protocol’s scope covers damage that results from LMOs, whether intended for direct use for food, feed or processing, or for contained use or for intentional introduction into the environment. Unlike the CPB, there is no differential treatment for any of these LMOs. This is justified as the focus is on providing a remedy for damage from LMOs and there is no rational basis to distinguish between the purpose of introducing the LMO to a country. Notably, excluded from the scope are pharmaceutical LMOs for humans that are addressed by other relevant international agreements or organizations, such as the World Health Organisation. This would include genetically engineered vaccines, such as micro-organisms genetically modified to transmit the hepatitis B vaccine. These are also excluded from the scope of the CPB: Article 5.

The LMO must have been the subject of a transboundary movement—whether intentional (in which case the use must be authorized), unintentional or even illegal: Articles 3.1 (chapeau), 3.2–3.4. Parties are at liberty to establish criteria for addressing damage. The domestic liability and redress law must also apply to damage caused by LMOs from non-parties: Article 2.7.

2.1 Damage

Damage is defined in the Protocol by Article 2 (2)(b) as ‘an adverse effect on the conservation and sustainable use of biological diversity, taking also into account risks to human health’. Also covered are material and personal damage ‘associated with the damage as defined in Article 2.2(b)’: Article 12.2. The damage to biodiversity must be measurable or observable taking into account where available scientifically established baselines recognized by a competent authority and must, as well, be significant. The inclusion of such qualifiers as ‘or observable’ and ‘where available’ softens the otherwise stringent requirement of science-based proof of damage. A non-exhaustive indicative list of factors is set out in Article 3 for establishing ‘significant’, namely:

a. The long-term or permanent change, to be understood as change that will not be redressed through natural recovery within a reasonable period of time;

b. The extent of the qualitative or quantitative changes that adversely affect the components of biological diversity;

c. The reduction in the ability of components of biological diversity to provide goods and services;

d. The extent of any adverse effects on human health in the context of the Protocol.

The definition establishes ‘hard criteria’ for proving damage to the environment (Jungcurt and Schabus 2010). Damage to human health is included by a rather awkward expression. The phrase ‘taking into account risks to human health’ is tagged to the preceding phrase ‘adverse effect on the conservation and sustainable use of biological diversity’. This repeats the formulation adopted in the Cartagena Protocol and is fraught

---

3 The cross-border movement of pharmaceuticals for humans in general is governed by the World Health Organisation’s (WHO) “Certification Scheme on Pharmaceutical Products moving in International Commerce” (Mackenzie et al. 2003: 57).

4 Article 4. This wording, in turn, has its origin in Article 8(g) of the parent treaty, the Convention on Biological Diversity (CBD) 5 June 1992, 1760 U.N.T.S. 79; see also volume 31, International Legal Materials, (1992), 818.
with the same problem of interpretation. Is damage to human health covered directly or must it be a consequence of damage to biodiversity? Both interpretations are plausible. In the absence of unambiguous guidance, it is left to parties to adopt either interpretation in their domestic law implementing the Protocol (Mackenzie et al. 2003: 11–12 and 32–33). A straight reading of Article 27 of the CPB which refers to rules on ‘damage resulting from … LMOs’ seems to cover any damage provided a causal link is established between the damage and the LMO. Indeed, parties agreed to a formulation proposed by the Co-Chairs at the final meeting that this phrase could cover all damage, directly or indirectly flowing from LMOs or products of LMOs provided the causal link between the damage and the LMO is established (discussed later under paragraph 6.1). Domestic law would prescribe how this link is to be established: Article 4. This suggests the inclusion of traditional damage. Until this agreement, reached on the last day of the negotiations at Nagoya, it was thought that the definition excluded traditional damage (Jungcurt and Schabus 2010).

‘Associated’ material and personal damage extends the reach of the N–KL Protocol beyond that provided in the objective and the definition of damage. The term remains unclear. What is the nature of ‘association’ required? The plausible argument is that the damage must be a consequence of damage to biodiversity. Else how can it be said to be ‘connected’? An example would be when an LMO contaminates the environment and damages biodiversity. At the same time, it may cause material and physical loss to a farmer whose field is affected by the contamination. This damage would clearly be covered.

3 The administrative approach

The Protocol envisages 2 approaches to deal with damage caused by LMOs. The first is the administrative approach. The second is through establishing civil liability.

3.1 Generally

The origins of the administrative approach can be traced to US legislation such as the 1980 Comprehensive Environmental Responsibility, Compensation and Liability Act (CERCLA). The concept was mooted by the European Union (EU) referencing the European Directive 2004/35 on environmental liability (Environmental Liability Directive). The Directive provides a framework based on the ‘polluter pays principle’ according to which an identified polluter is required to take remedial action to address damage. The whole process is dealt with by a designated administrative public authority, although any decision may be subsequently referred to court for judicial review. The merits of an administrative approach include the following. First, it is based on strict liability. Secondly, there is no need to go through the protracted court adjudicatory process to ascertain liability before requiring that response measures be taken, a significant advantage especially where immediate remedial measures are required either to address damage or to prevent imminent damage from occurring. Thirdly, the administrative approach is also particularly suitable where the damage is diffused, and there is no easy way to ascertain the wrongdoer. Fourthly, the approach is also suited to damage where there is no clear ownership of the subject matter damaged, such as the air, water and in this case biodiversity. This overcomes the procedural obstacle in some jurisdictions, which gives standing to sue only to those who can establish their direct interest in the subject matter over and above that of the general public (locus standi). Finally, the approach implements the ‘polluter pays principle’ as the responsibility is channelled to the person involved in the activity causing the
damage, that is, ‘the operator’. Also touted as advantages of this approach are the flexibility to accommodate different priorities, legal systems and practices of the operators involved; the science-based proof of damage; and its acceptance by industry as being transparent and fair (Jungeurt and Schabus 2010). However, to implement such an approach would require substantial resources and capacity—a bane for developing countries. It has also been suggested that it may be inapposite for smaller-scale damage. Developing countries fear that traditional farming communities would suffer disproportionately from damage from LMOs in particular in countries that are centres of origin of crop species (Appleton et al. 2008).

3.2 The administrative approach under the N–KL Protocol

The N–KL Protocol obliges parties to require the appropriate operator to take action in two situations: One, where there is a ‘sufficient likelihood of damage’; and two, where damage occurs. Where damage occurs, the operator must undertake a three-pronged action: inform the authority, evaluate the damage and take appropriate response measures: Article 5.1. Where there is a ‘sufficient likelihood of damage’, the operator has to take action to avoid the occurrence of the damage: Article 5.3. The authority may itself implement appropriate response measures where the operator fails to do so or for other reasons: Article 5.4—for example, where the operator cannot be identified. In such cases, the authority has the right to recover the costs and expenses from the operator for the measures taken. Notably, parties cannot limit or restrict any right of recourse or indemnity that an operator may have against any other person: Article 9. The response measures must be implemented in accordance with domestic law: Article 5.8.

3.3 Response measures

Response measures within the contemplation of the N–KL Protocol include a whole range of actions from preventative to restorative. Article 2(d) defines these as ‘reasonable actions to:

a. Prevent, minimize, contain, mitigate, or otherwise avoid damage, as appropriate;
b. Restore biological diversity …’

The restorative actions are stipulated along with the order in which they must be performed. The biological diversity must be restored to the condition that existed before the damage occurred, or its nearest equivalent. Where the authority determines this is not possible, then the loss must be replaced with ‘other components of biological diversity for the same, or for another type of use either at the same or, as appropriate, at an alternative location’.

There are a whole set of rules, grounded in fairness, that the authority must adhere to when requiring the operator to institute response measures. These include the notification to the operator of the decision requiring the operator to take response measures, reasons for the decision and notification of the remedies available under domestic law for challenging the decision. This includes recourse to courts or other authorities to challenge any decision made: Article 5.6.

The Protocol leaves significant discretion to parties to decide on the use of exemptions. The optional exemptions indicated are act of God or force majeure and act of war or civil unrest: Article 6. Parties also have complete discretion to decide on absolute or relative time limits: Article 7, and financial limits for the recovery of costs and expenses related to
response measures: Article 8. There is also an acknowledgement that parties ‘retain’ the right to provide for financial security in their domestic law: Article 10. Parties also have the discretion to decide who is to be the ‘appropriate’ operator in their law. The definition provides for a person in direct or indirect control of the LMO and specifies a list of choices: the permit holder, person who placed the LMO on the market, developer, producer, notifier, exporter, importer, carrier or supplier. The choice could be conditioned by the factual situation. For example, if the damage is caused by the intrinsic quality of the LMO such as its trait or behaviour caused by the transforming event, then clearly the developer would be the appropriate person required to take remedial action. Where the developer is not within the jurisdiction of the party where the damage occurred, liability may be channelled to any one of those listed as an operator who is involved in the transboundary movement of the LMO.

4 The civil liability approach

4.1 Generally

Civil liability is the attaching of responsibility for any damage through the civil—as distinct from the criminal or the administrative—process. Unlike criminal proceedings, it is not the State but the person alleging damage who initiates the process by bringing an action against the person causing the damage. The remedy sought is either monetary compensation or injunctive relief to prevent or remove the source of the damage. Generally, all national legal systems provide a person the right of recourse against the person responsible for the damage. To recover, a causal link must be established between the damage and the source of the damage, in this case the LMO; the nature of the damage must be foreseeable as arising from the activity; as must also be foreseeable the person to whom the damage may be caused. The broad notion is grounded on the principle of *ubi jus ibi remedium*—where there is a grievance the law must provide a remedy.

The rationale for establishing international rules and procedures for such damage that is recoverable in national law in any event, in respect of LMOs moved across boundaries, is to establish ground rules recognizable across jurisdictions as to the kind of damage recoverable, and how, when, where and against whom civil action may be initiated and proceeded with. The rules are thus rendered intelligible to all parties affected—the plaintiff pursuing the action; as well as the defendant against whom the action is initiated.

Civil liability may also be contrasted with the administrative approach. Civil liability is established through the judicial system of a country, where there is a contestation. Under the administrative approach, as earlier described, a designated administrative authority is empowered to implement the system.

4.2 Civil liability under the N–KL Protocol

The civil liability regime under the N–KL Protocol includes merely one article on civil liability, namely Article 12.

The Article obliges parties to either provide in their domestic law for rules and procedures that address damage by response measures or aim to provide these for material or personal damage associated with the damage as defined, discussed earlier.

Three options are specified to implement the obligation, namely:
a. By applying their existing domestic law. Such a law may consist of general rules and procedures on civil liability, in other words, a law that does not deal specifically with damage caused by LMOs; or

b. Apply extant civil liability rules and procedures that deal specifically with such damage; that is, a law that deals specifically with damage caused by LMOs; or, if there is no such specific law, then to develop such a law; or

c. Apply or develop a combination of both: that is, the general and the specific rules and procedures.

In contrast with the unqualified obligation to provide a domestic law dealing with response measures, parties must ‘aim to provide’ adequate rules and procedures in their domestic law on civil liability for traditional material or personal damage. ‘Aim’ means to strive or to try to attain the objective or purpose. Although the obligation is not absolute, the article nonetheless requires parties to make bona fide and concrete efforts to enact adequate rules and procedures for the damage envisaged. The Vienna Convention on the Law of Treaties requires parties to a treaty to perform their obligations in good faith (pacta sunt servanda): Article 26.5

A law developed to deal specifically with damage referred to in either of the situations referred to above must address, amongst others, the following elements:

a. Damage;
b. Standard of liability, including strict or fault-based liability;
c. Channelling of liability, where appropriate;
d. Right to bring claims.

4.3 An assessment of the civil liability provision

The Protocol is spectacularly deficient in providing for an effective civil liability regime. It leaves it to parties to implement their existing laws or develop new laws to take response measures or ‘aim’ to provide for remedies in respect of material or personal damage that is ‘associated with adverse effects on the conservation and sustainable use of biodiversity’. The problems of interpretation of this associated damage have been alluded to earlier. It is hard to ascertain what such ‘associated’ damage may be. Nor were countries who were insisting on this narrowly circumscribed definition during the course of the negotiations, able to concretely identify what such damage may be. Secondly, the components prescribed for inclusion in a national law are unexceptional and are staple fare in any law that deals with damage for torts. Nor is any substantive content suggested for any of the elements. They are vacuous.

Several, primarily developing country, parties that had initiated the need for a full-fledged civil liability regime had, over the several years of negotiation, provided text of the minimum elements for such a regime. These included elaborate text on key elements, including standard of liability, channelling of liability, interim relief, exemptions or mitigation, recourse against third party by the person who is liable on the basis of strict liability, joint and several liability, apportionment of liability, limitation of liability and coverage (Nijar et al. 2008, 183, and 186).

There were several liability approaches available in international law (elaborated later) on which the N–KL Protocol could have been modelled. All these potential models were

---

ignored. Instead, there was a reiteration of the right of parties to apply their existing law, or to develop a specific law, to deal with damage caused by the transboundary movement of LMOs. It has been opined that the civil liability article that obliges parties to provide in their domestic law any one of the three options as they deem appropriate (‘may as appropriate’) does not establish an international legal obligation to implement a civil liability system (Jungcurt and Schabus 2010). An opportunity was missed to advance international environmental liability jurisprudence by crafting an effective international liability and redress regime that could speak across jurisdictions with widely divergent legal systems, especially with regard to civil liability, traditional and socio-economic damage in the specific modern biotechnology sector.

Yet, this was not the outcome expected when the negotiations first started. Developing countries, organized as the Like-Minded Group, had demanded from the early days of the negotiations that an effective civil liability regime was pivotal to the establishment of a biosafety protocol. How was this ambition aborted after six long years of arduous negotiations? The next part of this article deals with how this came about.

5 The negotiations on liability and redress

5.1 Starting with the Cartagena Protocol on Biosafety: To include or not to include?

When the negotiations for a Biosafety Protocol first started in July 1996 with the first meeting of the Biosafety Working Group,6 delegates primarily from developing countries insisted that a regime dealing with the transboundary movement of LMOs had to incorporate provisions on liability and redress to deal with incidents of damage caused by the LMO. To them, it was the ‘crux of the biosafety issue’7. Such was the commitment that even negotiators sported the slogan ‘No Liability No Protocol’ on their coat lapels. However, there was no consensus on the need to address such an issue in the negotiations (Cook 2002). There was a clear North–South divide on the need for inclusion of civil liability in a protocol. Those who saw themselves as recipients of foreign LMOs argued that including such provisions would inspire confidence in the technology and help avert criticism from their populace to the import of LMOs. It would be viewed as the act of responsible government acting on a precautionary basis, and in the (unlikely, as industry asserted) event of damage, liability provisions would help them cope with any fallout from any incident. This was stressed as being particularly important as developing countries lacked the capacity to conduct a proper risk assessment and management. They also argued that a liability regime that channelled liability would make the polluter pay for any damage. The exhortation in the CBD that conservation of biodiversity was the common concern of mankind suggested, they argued, the need for international action to confront any adverse effects posed by LMOs—especially since these living forms could well cause irreparable damage. They pointed to the existence of several international treaties that dealt with liability for oil and potentially hazardous waste. Hence, they argued that mere reliance

---

6 The Working Group was set up by COP2 of the CBD in November 1995 vide COP Decision II/5. See UNEP/CBD/COP/2/19 available at http://www.cbd.int/doc/?meeting=cop-02.

on existing State responsibility was inadequate to deal with compensation for damage resulting from the transboundary introduction of the LMO into their country.

Exporting countries resisted the inclusion because they said that this would encourage a perception that this nascent technology could be hazardous. Besides they asserted that there was no knowledge of the kind of situations envisaged and, consequently, the extent of any exposure to liability. They pointed to State responsibility in international law as providing an adequate remedy. They deprecated any comparisons with other treaties dealing with proven hazardous material.

The discussions were indeed largely mired by the fact that the impact of LMOs was unclear and unknown. This prompted developing countries to insist on the inclusion of the precautionary principle as a critical component as the overarching basis for regulatory action. It would allow governments to take peremptory action in the face of scientific uncertainty as to the potential danger posed by the LMO.

The resistance by developed countries, backed by the biotechnology industry, to avoid any civil liability provisions increased the resolve of developing countries to insist on the inclusion of such provisions. They simply could not understand why industry was fighting so strenuously to exclude civil liability from the Protocol in the face of its sustained argument that LMOs caused no harm. Some industry representatives suggested setting up a voluntary fund in lieu of civil liability obligatory provisions. This suggestion quickly faded out, but was revived much later at a critical stage of the negotiations. Developed countries pointed to the protracted negotiations for liability instruments in other fields, to stress that the inclusion of civil liability would inordinately delay the conclusion of a Protocol, citing that liability under the Basel Protocol on hazardous waste had taken 6 years[^8], and the International Convention on Liability and Compensation for Damage in connection with the Carriage of Hazardous and Noxious Substances by Sea, 10 years to conclude.[^9]

However, central to the debate was the key question whether there should be a protocol on the international regulation of the transboundary movement of LMOs without including provisions on liability and redress for any ensuing damage.

Three proposals were advanced during the negotiations: first, the inclusion of substantive provisions; second, the inclusion of an enabling clause that would require a civil liability regime to be negotiated later; finally, no provision on civil liability. Within each of these categories there were variations. The exact positions of countries advancing each of these proposals differed widely. For example, amongst those advocating substantive provisions, the African Group presented a comprehensive and detailed text of a biosafety protocol replete with an extensive article on liability and compensation. Finally, it became clear as other issues took centre stage that time was running out to develop substantive rules on civil liability. Hence, parties resigned themselves to a proposal by Norway to include an enabling clause committing parties to develop rules on liability and redress within a prescribed time frame (Cook 2002). This was the genesis of Article 27 in the Cartagena Protocol on Biosafety (CPB) that was finally concluded and adopted on 29 January 2000.


5.2 Article 27 CPB and the commencement of the negotiations

Article 27 of the CPB reads as follows:

The Conference of the Parties serving as the Meeting of the Parties, shall at its first meeting, adopt a process with respect to the appropriate elaboration of international rules and procedures in the field of liability and redress for damage resulting from transboundary movements of living modified organisms... and shall endeavor to complete this process within 4 years.

At the first Conference of the Parties serving as the Meeting of the Parties of the CPB (COP/MOP1) at Kuala Lumpur in 2004, the process and a timetable for its conclusion was negotiated and established. The resulting Decision BS-I/8 created an Ad Hoc Open-ended Working Group of Legal and Technical Experts on Liability and Redress ('the Working Group' or ‘WG’). Five meetings of the WG were scheduled, and the process was slated to be completed in May 2008, to coincide with MOP 4 which was held in Bonn, Germany. However, by this date no instrument was even near completion. MOP 4 then directed negotiations to continue under a Contact Group, essentially the Friends of the Co-Chair (FOCC) group under which the negotiations had been proceeding thus far, since this group was established at WG5 in Cartagena in 2008. This informal grouping had yielded modest results at WG5—reducing the unwieldy text to a less bulky one—and it was decided at the enlarged FOCC meeting immediately preceding MOP4 (held in Bonn in 2008) to continue in this format. This enlarged FOCC consisted of a number of representatives from various regional groups: 6 from Asia Pacific (the countries were named Bangladesh, China, India, Malaysia, Palau and the Philippines); 2 from the EU; 2 from Central and Eastern Europe; 6 from the African Group; and 6 from Latin American and Caribbean group (GRULAC) and New Zealand, Norway, Switzerland and Japan. Two meetings were stipulated by the Decision. There was no outcome of two meetings that followed, in Mexico (February 2009) and Malaysia (February 2010). Two more meetings of the Working Group (essentially organized as the FOCC) were held, the first in Kuala Lumpur (June 2010) and the second in Nagoya (October 2010 immediately preceding MOP5). An outcome emerged only at the end of this second meeting at Nagoya before MOP5. Thus came into being the Nagoya–Kuala Lumpur Supplementary Protocol on Liability and Redress. It was formally adopted by MOP5 on 15 October 2010 by Decision BS-V/11. This was right in the midst of the rather difficult negotiations for the ABS Protocol and then proceeding in another part of the meeting hall, causing the negotiators involved in both the processes to almost miss that final hour.

5.3 The negotiations

The mandate established at COP/MOP 1 in Kuala Lumpur in 2004 required that the process that was left unaddressed by the CPB be proceeded with until completion within the prescribed time frame. Hence, the mandate directed that the WG elaborates rules on

---

10 Palau and Bangladesh dropped out almost at the outset. At a late stage one of these vacancies was filled by the Republic of Korea.

11 The account of the negotiations is based on the author’s personal notes of all of the negotiating sessions, including some not open generally to non-negotiators, and which are set out in Nijar and Gan (2008) and Nijar and Gan (2012).
liability and redress arising out of the transboundary movement of LMOs. The mandate also provided for one Technical Expert Group (TEG) meeting before the commencement of the first of the 5 scheduled Working Group meetings. This TEG meeting proved crucial in preparing the groundwork for the WG meetings. It laid out the potential considerations relevant to a comprehensive set of rules and procedures for liability and redress. It listed topics on which more information was needed and identified a list of options and issues for elements of an international regime. It is important to note that, aside from elements relating to State responsibility and State liability, all the rest of the elements related to a civil liability instrument, making it abundantly patent that this was the nature of the regime in the contemplation of all the parties. Indeed, no one suggested the administrative approach. The elements included damage (definition, threshold, nature, scope and valuation of), causation, standard of liability, channelling, financial security, settling claims, limitations (as to time and amount) and the standing to bring claims. These were appended as an Annex to the Report of the TEG and became the reference and organizational guide for further work at the WG meetings that were to follow.

From then on, beginning with WG1, the negotiations proceeded haltingly: ‘one-step-forward-and two-steps-backwards’. Parties pushing for binding rules provided concrete text on the elements. Others reverted to the discussion on the ‘need for’ a binding instrument. At WG2, for example, the United States and New Zealand (members of JUSCANZ) proposed the elaboration of criteria to assess the effectiveness of (and thus the ‘need for’) a regime. The criteria were included as an annex to the report. The Co-Chairs’ push for parties to provide concrete text for the elements was often thwarted by the insistence of some parties for ‘more information’ as a precondition to providing such text. This continued right through to WG3 with parties providing text on various elements, others dragging their feet in providing such text and the Co-Chairs’ valiantly synthesizing the presentations in a single document. At WG3, the Co-Chairs’ presented a streamlined document with unattributed text under the following general headings:

1. Possible approaches to liability and redress;
2. Scope;
3. Damage;
4. Primary compensation scheme;
5. Supplementary compensation scheme;
6. Settlement of claims;
7. Complementary capacity-building measures;

Along with State responsibility and State liability, the core provision was set out in the proposed ‘primary compensation scheme’. It consisted of the two approaches to liability and redress, discussed earlier: the administrative approach and the civil liability approach. The former approach, extant in US and European legislation, as noted earlier, and international instruments such as the Liability Annex of the Environment Protocol to the Antarctic Treaty were largely unheard of elsewhere. The approach was strongly opposed by most developing countries (Jungcurt and Schabus 2010, p. 201). By WG4, most parties

---

13 A Group comprising: Japan, the US, Canada, Australia and New Zealand.
understood the concept and were not averse to its inclusion as a feature additional to civil liability. From this meeting on, parties proceeded, and were required, to provide text on the basis of this structure.

However, the negotiations were in danger of stalling as no significant progress was discernible. Every proposal by the group advancing the cause of a binding civil liability approach, comprising most developing countries, met with strong opposition from the EU and other developed countries (Jungcurt and Schabus 2010, p. 203). The Co-Chairs then presented at WG5 a Core Elements Paper (CEP), which consisted of 4 ‘pieces’: the administrative approach, civil liability, supplementary compensation scheme and capacity building. There were elements proposed for each of these. The Chairs then proposed as a package the following: a binding administrative approach, a non-binding civil liability approach and a voluntary fund agreed to by industry combined with a collective approach to be funded by the parties and others and administered by the parties. Developing countries reacted against the CEP document as a package. But realization soon dawned that this document was the best basis for rescuing the negotiations from failure. Nonetheless, developing countries were resolute on the inclusion of a binding and comprehensive civil liability component. Up to then although some developed countries (and a handful of developing countries) hinted at their preparedness to consider a binding instrument, they nonetheless repeatedly asserted that this issue could only be resolved at the final stage of the negotiations when other contentious issues were resolved. The matter came to a head at COP/MOP 4 at Bonn in 2008. Developing countries banded together as the Like-Minded Friends—consisting of 83 developing countries—insisted on a threshold commitment by countries for a binding provision on civil liability (Jungcurt and Schabus 2010). They made clear that without this they were disengaging from the negotiations. This prompted the Co-Chairs to pose two key questions to the delegates:

- Is there an objection to work towards a legally binding instrument on an administrative approach?
- Is there an objection to work towards including in such legally binding instrument one article on civil liability?

This matter was resolved when finally, after several tense bilateral meetings that threatened to scuttle the negotiations, all parties that were hitherto intransigent, answered both the questions in the affirmative.

The negotiations with regard to the single binding civil liability clause then began in earnest. The concern of some developed countries, Japan was a notable example, was that their juridical system did not countenance rules on liability and redress for such LMO-related damage. Some others, such as the EU, New Zealand and Australia, wished to avoid a consequential overhaul of their existing comprehensive biosafety legislation (Jungcurt and Schabus 2010). Implicit in the objections of some others was the concern that acceding to the establishment of civil liability provisions would signal the inherent danger of LMOs and biotechnological products. Finally, the weak provisions discussed earlier were agreed to. To recap, parties were obliged to ensure that they were working ‘with the aim of’ providing adequate rules and procedures in their domestic law on civil liability for material or personal damage associated with the damage (as defined in Article 2, paragraph 2 (b)). They agreed to either continue to apply their existing general law on civil liability, or develop and apply or continue to apply civil liability law specifically for that purpose, or develop and apply or continue to apply a combination of both.
6 Other contentious issues

6.1 Products thereof

One of the elements that threatened to derail the negotiations related to the inclusion of ‘products thereof’ within the scope of the regime. Some argued strongly that such products were not included in the parent CPB and hence outside the scope of the present negotiations. Others pointed to the several references to ‘products thereof’ in the CPB as well as the fact that a liability and redress regime should cover all situations where damage could be attributed to an LMO. Negotiators sought to resolve the issue by examining scenarios highlighted by one of the Co-Chairs: first, where country A exports processed soy flour which has its origin in an LMO; second, where country A exports LMO soy bean to country B. Country B processes and kills the soy bean. It then enters the food chain and causes damage to biodiversity. It was conceded that in the first case, the CPB had no application. In the second, the phrase in Article 27 of the CPB requiring rules on ‘damage resulting from … LMOs’ could be interpreted to cover not only damage flowing directly from LMOs but as well damage from (resulting from) products of LMOs, provided the causal link between the damage and the product is established. On this basis, parties agreed to a formulation that would be reflected in the FOCC Report. It read:

Parties may apply the Supplementary Protocol to damage, as defined in the Supplementary Protocol, caused by non-living material that finds its origin in a trans-boundary movement of a LMO.

However, the EU, which had not hitherto participated in the negotiations in the small group dealing with ‘products thereof’, objected to this formulation when the matter was brought to the rest of the FOCC. The matter was finally resolved when parties agreed that in lieu of the reference to ‘products thereof’ in the protocol, the Report would state an understanding of some parties that the Supplementary Protocol applied to damage caused by products thereof. The text appears as paragraph 12 in the Report as follows:

It emerged during the negotiations of the Supplementary Protocol that Parties to the Protocol hold different understandings of the application of Article 27 of the Protocol to processed materials that are of living modified organism–origin. One such understanding is that Parties may apply the Supplementary Protocol to damage caused by such processed materials, provided that a causal link is established between the damage and the living modified organism in question.

6.2 Financial security

The N–KL Protocol states that parties retain the right to provide for financial security in their domestic law: Article 10. This is an odd provision stating what countries can do in any event. Yet, it conceals a long history of intense negotiations and was one of the two issues which threatened right up to the 4th meeting of the FOCC to derail the process. A large number of countries were insistent that parties require the operator to provide financial security, primarily in the form of insurance cover in respect of potential damage.

15 The two groups negotiating were, on the one hand—the African Group, Bolivia, Malaysia, Peru and the Republic of Korea; and on the other—Brazil, Paraguay, Mexico, Philippines and South Africa. As to the understanding see UNEP/CBD/BS/COP-MOP/5/17, at p. 21, paragraph 133, http://www.cbd.int/mop5/documents. For the groupings, see Nijar and Gan (2012) at p. 64.
Some others were adamant that there be no provision on financial security. They argued that the provision would send a wrong signal to the biotechnology industry, be difficult to operationalize as to the quantum and the period for the security, hamper the entry of small- and medium-sized national biotechnology firms and adversely affect food security. They also raised the spectre of such a provision violating the rules of the World Trade Organisation. This only increased the resolve of the proponents to insist on the assertion of the right of countries to impose such a requirement in their national law. The final compromise reflects the competing concerns, with the inclusion of a provision that the right must be exercised ‘in a manner consistent with … which does not accord the World Trade Organisation a pre-eminence over the N-KL Protocol: Article 10.2. Parties also agreed that the first COP/MOP authorizes a comprehensive study on the modalities of financial security mechanisms, an assessment of the environmental, economic and social impacts of these mechanisms especially on developing countries, and an identification of the appropriate entities to provide such security: Article 10.3. The first review of the Protocol, to be conducted 5 years after its entry into force, must address the effectiveness of this Article on financial security: Article 13.

7 The compact

In the course of the negotiations, the biotechnology industry announced that key players in the industry were prepared to accept liability for biodiversity damage by LMOs. Six of the largest companies signed a private contract—‘The Compact: A contractual mechanism for response in the event of damage to biological diversity by the release of a living modified organism’ (Compact). It has been suggested that it was this act by the industry that provided the fillip to the acceptance by countries of the N–KL Protocol (Telesetsky 2011). The parties to the Compact agree to pay for any damage caused to biological diversity for any LMO they have released and agree to binding arbitration under the auspices of the Permanent Court of Arbitration. The expectation of these industry leaders is to negotiate and secure insurance to underwrite the financial losses of their members. The Compact goes further than the N–KL Protocol in providing specifically elaborated legal standards: Article 3.5. The standard of proof required must be ‘clear and convincing’, which is defined to mean that the ‘measure or degree of proof that will produce in the mind of the decision-maker a firm belief or conviction as to the truth of the allegations sought to be established’: Article 2.4 (lix). The Compact limits liability for members to ‘misuses’ unlike the N–KL Protocol which applies to all damage arising from intentional as well as unintentional transboundary movements. Further, the Compact limits liability to ‘compensable’ environmental damage, while the Protocol addresses ‘significant’ adverse effects. Compensable claim requires a demonstration of general causation, specific causation (damage would not have occurred but for the release of the LMO) and proof that

17 See submission of Brazil in Nijar and Gan 2012, p. 144.
18 This is accomplished by a cross-reference to the final three preambular paragraphs of the CPB, which state that trade and environment agreements be mutually supportive and not be subordinate to the other.
'there is no superseding event or logically unrelated or remote event that alters the chain of events that otherwise might have connected the release of that LMO to the damage to biological diversity': Article 2.4(x). Significantly, the Compact, unlike the Protocol, does not address adverse effects related to human health directly, although indirect references may be gleaned from a clutch of articles relating to impacts on public health: 2.4(xl), 9.2(c), 9.4(d) and Appendix C. There are financial limits stipulated for a single incident: US $30 million Special Drawing Rights (SDR) for remediation and US$15 million SDR for compensation. For a given LMO, the financial limits are capped at US$150 million SDR for remediation and US$75 SDR for compensation: Article 13. The N–KL Protocol provides that parties may provide for financial limits for recovery of costs and expenses related to response measures: Article 8. No such limitation provision exists for civil liability.

8 Prospective international regimes

The civil liability provisions of the N–KL Protocol could have been based on any one of three possible forms, namely a transnational process regime, a uniform private law regime or an arbitral regime (Nijar 2000, pp. 50–52). This part briefly describes these forms. This may prove particularly useful in the future when parties consider the implementation of the N–KL Protocol under Article 13. It specifically provides for the review of Article 10 (on financial security) and Article 12 (on civil liability).

8.1 Transnational process regime

A transnational process regime would be process orientated. It would not establish substantive standards to be applied by national courts, but merely strengthen local remedies available by eliminating or minimizing difficulties relating to such common elements as subject matter, jurisdiction over natural persons, the most convenient forum for preferring claims, the applicable law to decide questions in dispute and enforcement of judgments.

An example: Party A’s national suffers damage as a result of the transboundary movement of genetically modified organisms. The damage is caused by the national of party B. The Protocol could enable A’s national to sue in the courts of B on the same basis as B’s nationals, that is, as if A were a national of B. A, as a State, would also be allowed access to B’s courts for any damage it suffers. These avenues for recourse are available even without an international instrument according to such rights, except that the courts of B may decline jurisdiction on the ground of forum non conveniens (not the most suitable forum), nor may a State wish to submit itself to the jurisdiction of the courts of another country, regardless of whether there is a Protocol. Provision could also be made to facilitate inspections, exchange of information and consultations between States. Such an approach has been adopted in the Convention on the Protection of the Environment between Denmark, Norway and Sweden (the 1974 Nordic Convention).

An international fund could be established to take care of the plaintiff who has no or limited resources to pursue his or her claim.

---


Even for such an approach there are drawbacks. The main drawback is that the provisions of the Protocol will be left to national courts to adjudicate upon. Claims may succeed in one court and not another. Then again certain claims may be accepted in some jurisdictions and not in others. Claims for life and property damage are common to most if not all jurisdictions. But different jurisdictions differ in allowing claims for depletion of the environment, or economic loss flowing from such damage. The quantum awarded may also vary greatly. Both the procedural and substantive rule for proving a case may also vary with different jurisdictions. This lack of uniformity could give rise to an unfair international system of dealing with exposure to common damage.

Then finally, there is the problem of ensuring compliance by the State of its obligations.

8.2 Uniform private law regime

An improvement on the transnational process regime would be a uniform private law regime approach. It would establish a binding agreement specifying a body of liability law enforceable in domestic courts against private individuals. In other words, a party to any such instrument must enact national liability laws incorporating the elements specified in the international agreement it has signed. The specific content of each important element would also be specified.

Most multilateral environmental liability agreements of the past decade have adopted this approach. In addition to covering jurisdiction over foreign persons and entities and the enforcement of judgments, such a regime will set out clear internationally recognized liability standards. These would include standing to sue, nature of liability, burden of proof, damages that could be claimed and limits on recovery. Further provisions could deal with matters of ensuring recovery of compensation awarded, such as compulsory insurance, and/or an international fund.

An example of a uniform private law regime is the approach of the Convention on Civil Liability for Oil Pollution Damage dealing with liability for pollution damage from oil spills, and the Basel Protocol on Liability and Compensation resulting from the Transboundary Movement of Hazardous Wastes and their Disposal. Several conventions in the field of nuclear energy also adopt this approach.


Many complex and myriad issues have to be dealt with, such as who is to be liable, the standard of liability, financial caps, types of damage recoverable, satisfaction of judgment, setting up of funds or other schemes (such as insurance) for that purpose and liability of governments to pay for shortfalls.

The acceptance of such a liability regime would require parties to incorporate the provisions agreed internationally in a national law. Then, a person who suffers damage could seek relief from a domestic court of a party. The choice of the court will be established by the instrument. This court will have to decide the claim by applying the rules on liability and compensation set out in the instrument.

An international fund would likely need to be set up to support the uniform private law regime on liability. It may be made obligatory. There would be a fund authority with specific functions such as providing funds to satisfy a judgment where, for any reason, the funds are not otherwise forthcoming or are inadequate. Funds could also be made available to pursue litigation, to provide financial aid for emergency clean-up for the damage and to indemnify a person upon successful conclusion of the litigation. An example of such a fund is that established under the 1992 Fund Convention for Oil Pollution Damages.25

8.3 International arbitral regime

The role of governments in the two preceding regimes discussed is as a facilitator for private parties to pursue their claims. The government’s role is confined to negotiate and create an international instrument for this purpose. The State’s role does not extend to participation in actual litigation, unless the State is itself claiming reparation for damage to its interest qua State.

In an international arbitral regime, governments would act as claimants and defendants through an intergovernmental dispute resolution mechanism. The 1972 Space Objects Liability Convention is an example.26 Here, the State is held liable for activities that could have been undertaken by individuals or entities. The claims process is also as between two States.

In such an arbitral liability instrument, a State whose environment or nationals suffer the harmful effects of, say an LMO, could bring a claim against the State where the LMO originated, the State with jurisdiction over the entities in operational control of the LMOs at the time of the release, or the State where the LMOs were released.27 The instrument would then establish a claims procedure. It could make the International Court of Justice the final adjudicator or provide for recourse to a form of international arbitration through special tribunals such as the Permanent Court of Arbitration and its Optional Rules for

---


Arbitration of Disputes relating to Natural Resources and the Environment. A third option would be to establish a panel of experts to undertake the arbitral function. The applicable law would have to be specified, as well as the substantive liability rules, as has been done for the Space Objects Liability Convention.

8.4 The approach of the N–KL Protocol

States have adopted treaties introducing specific liability regimes in the case of activities described as hazardous, as the preceding discussion shows. These treaties reflect a level of harmonization of rules concerning liability and redress, despite the diverse negotiating fora (Cullet 2006). The N–KL Protocol neither adopts nor incorporates any of these liability approaches. An opportunity was missed to develop a harmonized liability approach in respect of potential harm from the specific characteristics of an emerging modern technology (Cullet 2006: 170). The Protocol essentially requires (as for response measures) or exhorts parties to strive to do (for traditional civil liability damage) what they can do in any event in the exercise of their sovereign right. With regard to civil liability in particular, it does little more than reiterate the right of parties to apply their existing law, or to develop a specific law, to deal with damage caused by the transboundary movement of LMOs. The parties are given complete discretion whether or not to apply civil liability procedures, as well as several other provisions related to time limits, financial limits and financial security. In short, the negotiators sidelined civil liability and opted instead for the administrative approach, primarily to overcome the deadlock in the negotiations (Morgera and Tsioumani 2011).

9 The way forward

The unity of developing countries forged at the outset of the negotiations dissipated at the closing stages. A possible beneficent reason is that in the course of the 6-year negotiations, some of these countries were embracing modern biotechnology in their national development plans or hoped to do so and recoiled from their initial insistence on a strong civil liability regime in response to their national biotechnology sector. The change of position became evident at the Friends of the Chair Meeting at Putrajaya, Malaysia, in 2010. This, it is submitted, was the singular cause for the adoption of the rather weak provisions on civil liability.28

The added value of the N–KL Protocol is perhaps the inclusion of the administrative strict liability approach in dealing with damage to biodiversity and the nature of the response measures required to either restore or replace any loss. Countries for which such an approach is novel will need the assistance of COP/MOP deliberations and decisions to help overcome the challenges of implementation. This could be accomplished under the regular review of implementation required by COP/MOP under Article 14.

As regards civil liability, the position is not hopeless. First, there is now in place an international binding provision that deals with civil liability. The N–KL Protocol implicitly obliges parties to review their domestic laws to assess whether or not they have in place adequate rules and procedures on civil liability bearing in mind the need to address the elements set out in Article 12.3. They have then to act accordingly as required by Article 12 with the aim of ensuring that they have an adequate domestic law in place to deal with

28 Other commentators also take the same view (Jungcurt and Schabus 2010).
liability and redress for the damage caused by LMOs. This entrenches civil liability as an obligatory requirement in the national law of parties. Secondly, Article 13 requires COP/MOP to review the effectiveness of Article 12. This must take place 5 years after the entry into force of the N–KL Protocol and every 5 years thereafter. The drawback is that this review is conditional upon parties providing information requiring such a review. No such precondition for review exists in the Cartagena Protocol on Biosafety: Article 35. Hence, if no information is made available by parties relating to damage, it is possible that the COP/MOP may decline to undertake any review. The nature of the information that would trigger a review is not specified. Such information could relate to the inability or failure of parties to enact any, or any effective, civil liability laws. In this eventuality, COP/MOP may be obliged to assess whether parties have made efforts to assess and put in place the necessary ‘adequate’ laws on civil liability. These efforts must be reported to COP/MOP. Article 33 of the CPB, which applies by virtue of Article 16.3 of the N–KL Protocol, obliges parties to report to the COP/MOP the measures they have taken to implement their obligations.

10 Conclusion

The N–KL Protocol incorporates substantive obligatory provisions on the administrative approach for parties to include in their domestic law. This is an important added value to addressing consequences of any adverse effects on biodiversity. However, there are important implementation challenges. The EU—on whose practice the administrative approach in the N–KL Protocol is largely based—has faced considerable obstacles in implementing this approach in dealing with environmental damage.29 The challenges to other countries, for which this approach is novel, can be expected to be considerable, especially in terms of resources and capacity. In contrast, most countries would be familiar with civil liability. Despite the paucity of specific substantive provisions, there is nonetheless an obligation for parties to enact adequate domestic laws to provide for response measures as well as for traditional damage. This provides flexibility to parties to develop civil liability laws that are compatible and workable with their national legal systems. The nature of the domestic law that parties may enact may be expected to depend to a large extent on the interplay between the governmental authorities concerned with preserving biodiversity and those concerned with promoting the biotechnology industry. The role of the private sector especially multinationals will be critical in influencing this process.

Further, the imbalance between the rules on the administrative approach and those on civil liability reflects that this is as far as the negotiations could have realistically and pragmatically gone, given the diametrically opposing views of the protagonists in the negotiations. It is hoped that with experience and in the ripeness of time, aided by the

29 The obstacles are highlighted by an identification of the difficulties and implementation challenges in transposing its Directive 2004/35/CE into national law. These include the following: fitting the provisions of the Directive into the existing national frameworks, challenging technical requirements such as the need for economic valuation of environmental damage, the different types of remediation, and damage to protected species and natural habitats, and, the framework character of the Directive which gives wide discretionary power to member States to implement: Report from the Commission to the Council, the European parliament, the European Economic Social Committee and the Committee of the Regions: Under Article 14(2) of the Directive 2004/35/CE on the environmental liability with regard to the prevention and remediying of environmental damage, European Commission, Brussels, 12.10.210, COM(2010) 581 final, at paragraph 21.
review process, the framework established by the N–KL Protocol will lead to the establishment of a mature regime incorporating substantive and comprehensive international rules on civil liability and redress for damage caused by LMOs.

References


