International Environmental Law[1]

1. Nature and sources

The term international environmental law (IEL) can be used to describe the application of international law to environmental problems. It has evolved by applying the rules and principles of general public international law and its sources, but also from private international practices and national laws for the protection of the environment. Today, international treaties are the most common source for multilateral rules and regulations on the environment.

Historically, public international law is built on the notion of state independence and territorial sovereignty. A state's "Permanent Sovereignty over Natural Resources" (PSNR) is recognised under customary international law. Hence, in order to address common environmental concerns, such as the marine environment, fisheries resources or oil spills there was a need to use other sources of law. In this connection domestic law and soft-law documents, such as the 1972 Stockholm and 1992 Rio Declarations, became of particular importance.

Legal concepts, such as precaution, polluter-pays, common but differentiated responsibilities or sustainable development, were first introduced through soft-law documents such as resolutions, guidelines or declarations of principles. They lay down parameters and provide guidance on states' conduct but do not state hard-law rules and commands. States are therefore more likely to agree on aspirational goals.

However, since they are often worded in a lawmaking manner, soft law documents can be a potential stepping-stone towards the negotiation of binding legal commitments. They provide subsequent guidance on the application and interpretation of treaties, and may also be used by the courts. Accordingly, soft law principles have exerted significant influence in the development of international environmental law.

2. Institutions

International environmental treaties are governed by its member states. In general, they delegate certain powers to either existing institutions or create new ones with a specific mandate. Even though there are an estimated 500 multilateral environmental treaties in force, the UN only has a programme on the environment (UNEP) but there is no separate global governance body for the environment.

The UN's most important organs are the General Assembly (GA), the Security Council and the Economic and Social Council (ECOSOC). The General Assembly is the main deliberative and policymaking body formed by all member states. Every year it adopts important resolutions in any matter of the UN Charter. Such soft law declarations may sometimes crystallize in treaties and customary law. The Security Council is mandated to maintain international peace and security. Therefore, it may intervene in environmental issues only when necessary to maintain such peace and security. ECOSOC is the UN institution for international cooperation in economic and social development. It is supported by UNEP and the Commission on Sustainable Development (CSD).

[1] This section is based on a presentation by Ruth Mackenzie on 1 April 2013.

UNEP was set up in 1972, following the Stockholm Conference, and focuses on issues such as biodiversity, hazard waste, climate change, atmospheric and marine pollution. Its tasks include clustering the environmental agreements by coordinating between treaties and secretariats, and ensuring their implementation in a harmonious manner. As a result of the ever increasing number and variety of environmental agreements, their coordination is a major challenge for UNEP. To date, several attempts to strengthen global environmental governance structures have failed. The CSD was established following the Earth Summit in 1992 as a permanent forum for discussions of sustainable development policy but has not been very active.

There are also many specialised UN agencies such as the Food and Agriculture Organization (FAO) or the International Maritime Organization (IMO) that play an important role in the development of IEL. They are responsible for the negotiation and conclusion of various Multilateral Environmental Agreements (MEAs) and at times also actively monitor and facilitate their implementation.

3. Processes

IEL is characterised by multilateral treaties that establish a framework or umbrella regime with flexible implementation and enforcement mechanisms. Such framework treaties usually comprise general principles and basic commitments in the governing legal instrument (e.g. "convention"), leaving more specific rules and technical details to protocols, annexes and subsequent decisions by the meetings of the parties. This dynamic design permits rules and standards to be changed in line with evolving scientific knowledge.

As part of such as "regulatory regime" the parties need to meet at least occasionally and are usually supported by expert bodies. The continuous negotiation process under a framework (or umbrella) treaty is characterized by a consensus-based approach to ensure widespread acceptance of outcomes. Legally, the parties' subsequent practice and decisions clarify and can at times even amend the original treaty provisions.

Many regulatory regimes to protect the environment contain formal compliance procedures to ensure parties adhere to their obligations. They usually focus on enabling and incentivising compliance rather than binding adversarial dispute resolution. But they can also provide for certain sanctions (e.g. withholding of funds or trading rights) and a system of "naming and shaming".

4. Relationship with other subject areas

International environmental law issues overlap with other areas of public international law such as trade, foreign investments or human rights. The cross-cutting nature of environmental protection efforts is the underlying rationale of the "environmental integration principle", that aims to ensure that environmental protection is taken into account in every non-environmental policy.

With the exception of the UN Charter, there is no hierarchy between different international agreements. Sometimes treaties address possible conflicts and determine which norms will prevail. Otherwise, if states are bound by conflicting treaty obligations, the principles of *lex posterior derogate prior* (a later rule repeals an earlier one) and *lex specialis* (a specialized rule takes precedence over a general rule) apply.[2] In practice environmental protection

[2] Vienna Convention on the Law of Treaties, Art.30.

concerns are usually integrated and addressed under the relevant treaty regime (and not another legal framework). This may be illustrated by the following examples:

- Since the start of 2012, emissions from international aviation are included in the EU Emissions Trading System to reduce greenhouse gas emissions and combat climate change. Operators will have to report on their annual emissions and surrender an equivalent number of allowances. This may conflict with the rules on international trade negotiated under the World Trade Organisation. However, those rules also provide that trade restricting measures are allowed if they are necessary "to protect human, animal or plant life or health" (unless they constitute a means of arbitrary or unjustifiable discrimination).
- Environmental protection measures are often deemed to have an adverse effect on foreign investments. The 1994 Energy Charter Treaty deals with inter-governmental cooperation in the energy sector from exploration to end-use and all energy products and energy-related equipment. In conjunction with the protection and promotion of foreign investment it aims to support energy efficiency and to minimise the environmental impact of energy production and use.
- In many cases, human rights treaties have been applied to address environmental concerns through, for example, the right to life or health (under the European Convention on Human Rights). There are also legal instruments that specifically refer to a human right to a satisfactory, clean or healthy environment (e.g. the 1981 African Charter on Human and Peoples Rights). The 1998 Aarhus Convention is a multilateral agreement devised to enhance rights to information, participation and justice in environmental decision making.

5. Principles of IEL

Many MEAs articulate particular principles. These principles provide a degree of authoritative guidance and an expectation that they will be adhered to if possible. They usually include the following:

a) No harm

The "no-harm principle" or "principle of prevention" is a widely recognised rule of customary international law whereby a state is duty-bound to prevent, reduce and control the risk of environmental harm to other states. The legal precedent usually cited in this connection concerns a Canadian smelter whose sulphur dioxide emissions had caused air pollution damages across the border in the US.

The arbitral tribunal in that case determined that the government of Canada had to pay the United States compensation for damage that the smelter had caused primarily to land along the Columbia River valley in the US. It found that "under the principles of international law, as well as of the law of the United States, no State has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein, when the case is of serious consequence and the injury is established by clear and convincing evidence".

Subsequently, the no-harm rule has been incorporated in various law and policy documents. Principle 2 of 1992 Rio Declaration states: "States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental and developmental policies, and

the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction."

The contemporary elaborations of the no-harm rule tend to refer to any damage to the environment (including in areas beyond the limits of national jurisdiction) and recognise that environmental protection has to be balanced against the "Permanent Sovereignty over Natural Resources".

Some commentators argue that it is less an obligation "not to harm" than to act with due diligence – to take the due measures to prevent and minimize harm. This is relatively tangible in a bilateral transboundary setting where one state is, for example, planning to build a polluting facility at a shared river course. If there is the potential for harm to the other state the project has to be preceded by due notification, consultation and assessment (to ensure any potential harm is prevented and minimized).

b) Cooperation and Environmental Impact Assessment

The principle of international cooperation is a foundational concept for the obligation to prevent transboundary environmental harm. It has resulted in the emergence of specific procedural obligations to notify and consult neighbouring states on the environmental risks of projects, especially when shared natural resources may be affected. However, it does not imply a veto right.

Specific procedural obligations to collaborate are often part of bi- or multilateral agreements on the management of a shared watercourse. The Pulp Mills case between Argentina and Uruguay, for example, was based on an agreement between Argentina and Uruguay on the construction of a pulp mill at the riverside. The question first brought to the court was whether Uruguay had complied with the agreement and acted cooperatively.

Even though there was no specific treaty provision on the need to undertake an Environmental Impact Assessment (EIA), the International Court of Justice found that, where a transboundary environmental impact can arise, there may be an obligation to carry out an EIA. This is a remarkable example of how international courts can play a role in creating international environmental law.

c) Precaution

Precaution is usually described as a principle or approach to prevent further environmental damage against a backdrop of scientific uncertainty. It is used as a procedural tool to lower the standard of proof in situations where the complexity of scientific facts leads to a degree of uncertainty.

Principle 15 of the Rio Declaration states: "In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."

A precautionary approach can be found in several environmental treaties. The 2000 Cartagena Biosafety Protocol is arguably a precautionary-based agreement, as there are still

uncertainties about the harms genetically modified organisms (GMOs) can cause. Where a state is about to import GMOs for the first time, it has the right to receive full information, notification and take a decision based on risk assessment. Similarly, agreements on fish stocks adopt a precautionary approach as states have to take into account various uncertainties in determining fishing quotas.

While part of various environmental agreements, it is still disputed whether the precautionary principle has become a norm of binding international customary law. The International Tribunal of the Law of the Sea (ITLOS) found that in connection with activities in seabed area it is at least in the process of attaining this status. The ICJ is expected to address the question in its forthcoming judgment in the Whaling case (Australia v Japan).

d) Common but Differentiated Responsibilities

The principle of Common but Differentiated Responsibilities (CBDR) and Respective Capabilities (CBDRRC) describes the idea that all states are responsible for the environmental protection, but their responsibilities differ according to their respective historical contributions and capabilities.

The UN Framework Convention on Climate Change (UNFCCC) provides for the different treatment of developed and developing countries in several areas. Developed countries, for example, have mitigation commitments while developing countries have to "take measures". Developed countries should provide financial resources and transfer technology to developing countries.

While the UNFCCC distinguishes strictly between developed and developing countries, other treaties (such as the Montreal Protocol or IMO conventions) also assign differentiated obligations to developing countries. Certain commitments may apply across the board but differ in terms of expected levels of achievements and timelines for compliance by developing states.

However, the emergence and rapid growth of some developing country economies (e.g. Brazil, China or India) has led to a debate as to whether the differentiation under the UNFCCC is still adequate. Whilst developed countries emphasise the change in capabilities, developing countries underline the historic responsibility of industrialised nations. They argue that developed nations have exhausted their fair share of the available atmospheric space while developing countries still need to grow in order to eradicate poverty.

e) Polluter Pays

The Polluter Pays Principle (PPP) provides that the costs of pollution should be borne by the entity responsible for causing the pollution. It has been widely incorporated in domestic legal systems and environmental regulatory regimes. It also underpins existing civil liability instruments such as those related to transboundary GMOs, oil spills and nuclear accidents.

Principle 16 of the 1992 Rio Declaration states: "National authorities should endeavour to promote the internalization of environmental costs and the use of economic instruments, taking into account the approach that the polluter should, in principle, bear the cost of pollution…."

The PPP is not recognised as a rule of customary international law that would apply between states. The PPP aims to internalise costs of pollution at source – focusing primarily on industry, not states or governments.

To date, the application of the PPP in the climate change context (between states) has been strongly rejected by developed countries. During the drafting of the Convention, India supported by many G77 nations, proposed the inclusion of a reference to the responsibility of industrialised countries for existing levels of pollution in UNFCCC, Article 3. This proposal was opposed by most developed countries and not incorporated into the final text.

6. Multilateral Environmental Agreements

MEAs are autonomous arrangements, which provide a legal framework to tackle environmental issues of common concern in the international context. Since the 1970s a growing number of such agreements has been adopted, most of them during the 1990s in response to political pressure for the application of a sustainable development approach to the use of limited natural resources.

In order to streamline a fragmented system of treaties addressing different components of the global environment, UNEP has been tasked to facilitate coordination and enhance domestic participation. UNEP has, for instance, helped to harmonise reporting requirements under the different legal regimes and to organise MEAs in thematic "clusters" depending on the nature and source of pollution and environmental harm they deal with (see above). UNEP currently categorises the MEAs in three areas: climate and atmosphere related; chemical and waste; and biodiversity and land-related. Many of them are of potential relevance to climate change and its impacts.

a) Examples of biodiversity and land related MEAs

The biodiversity and land-related MEAs, for example, include the Convention of Biological Diversity (CBD), Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Convention on the Conservation of Migratory Species of Wild Animals (CMS or Bonn Convention) and the World Heritage Convention (WHC).

A distinctive feature of the biodiversity-related conventions is the "listing approach". In order to ensure protection of fauna and flora, a list of endangered species is drawn up and regularly updated. The 1973 **CITES** seeks to ensure the protection of different species from threats associated with trade. Species are therefore listed in three appendices of the Convention according to different levels of protection:

- Appendix I includes species threatened with extinction and forbids trade unless in exceptional cases;
- Appendix II admits trade to its species, but in a controlled manner;
- Appendix III embeds species protected in at least one country, which asked for support in controlling the trade.

Recently, a proposal to list polar bears in Appendix I was put forward by the United States as a result of threats (the melting of polar ice caps) associated with climate change. It did not succeed as it did not qualify as threat by trade. Nevertheless, this shows the increasing linkages between climate change and other international agreements.

Wetlands absorb large amounts of CO2 and are important for climate change mitigation. The 1971 Ramsar **Convention on Wetlands** aims to ensure "the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world".

Under the Ramsar convention its parties established a procedure that requires each member state to designate at least one wetland of outstanding importance that would be included in a list of wetlands of international importance. The enlisted sites must be managed in a “wise use” fashion, i.e. as to enhance conservation and the sustainable use of the ecosystem and its natural resources.

The 1979 Convention on the **Conservation of Migratory Species of Wild Animals** (CMS or Bonn Convention) addresses the conservation of terrestrial, aquatic and avian migratory species. It operates under the auspices of UNEP and collaborates with CITES and the CBD to coordinate actions to protect crosscutting wildlife and habitats at a global scale.

The CMS also features a listing approach, in the appendixes of the convention, to protect “threatened migratory species” and “migratory species requiring international cooperation” respectively. It has provided the framework for the conclusions of several other agreements and Memoranda of Understanding (MOUs) to protect particular regional species. Climate change can affect migration patterns and routes.

The 1972 **World Heritage Convention** seeks to protect the cultural and natural heritage in the territory of its member states. Parties can nominate potential sites to the World Heritage List, and the World Heritage Committee decides on their inclusion (and also on their delisting). The listed sites are subject to permanent protection and oversight for the benefit of future generations. Various sites are affected by climate change. The World Heritage in Danger List is for heritage sites under threat of losing their characteristics which require financial support or corrective action.

The convention operates under the authority of United Nations Educational, Scientific and Cultural Organization (UNESCO). The World Heritage Committee is the ultimate decision-making body in the convention. It is formed of 21 representatives from states parties, elected by the UNESCO General Assembly. It decides, for example, on the use and allocation of resources from the World Heritage Fund.

The 1992 **Convention of Biological Diversity** (CBD) is a comprehensive agreement on the conservation and use of biological diversity. Biodiversity is affected by climate change but through the ecosystem services it supports, also makes an important contribution to climate-change mitigation and adaptation. Subsidiary instruments to the CBD address, for example, the access to genetic resources (2000 Cartagena Protocol on Biosafety) and benefit sharing (2010 Nagoya Protocol on Access and Benefit-sharing) in more detail using programmatic approaches rather than bans or phase-outs.

The mechanisms and language of the CBD tend to be vague and flexible (e.g. “as far as possible”). On the other hand, it sets out important guidelines and criteria for project activities, such as REDD, biofuels and hydropower.

In the UK, hydropower barrages are a serious threat for migratory birds, leading to a conflict between renewable energies and natural conservation. Similarly, the use of biofuels as a source of renewable energy may threaten food security and become a driver of

deforestation. Consequently, decisions will have to be taken to resolve conflicting interests. This illustrates the urgent need for improvements in the coordination and information flow amongst MEAs.

b) Common elements of MEAs

Since the 1990s MEAs have been designed following a similar pattern. "Objectives" and "principles" reflect complex negotiation outcomes in usually rather broad and vague terms. The substantive legal obligations are established and furthered in separate subsidiary instruments – e.g. a protocol or an annex. A degree of differential treatment defines the burden-sharing rules between parties.

MEAs usually create a framework of cooperation and envisage the adoption of further legal instruments. The Conference of the Parties (COP) to the UNFCCC can adopt protocols and annexes. The Cartagena Protocol on Biosafety was adopted under the CBD and the Protocol also allows for the adoption of further instruments – e.g. the Nagoya - Kuala Lumpur Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety.

As a result institutional arrangements and decision-making processes are formally carried out in separate systems (e.g. the Convention and the Protocol) and legally autonomous processes. This contributes to the fragmentation of international environmental law and policy making. In practice, however, there is also a tendency to harmonise and consolidate decision making (e.g. joint meetings or "Conference of the Parties serving as the Meeting of the Parties").

The meetings or conferences of the parties to an agreement (after its entry into force) are the main mechanism through which the regime evolves. They allow countries to meet regularly in order to address future challenges, review provisions and adopt necessary decisions. But at the same time they generate an enormous pile of decisions, whose legal status is debatable and whose implementation depends on domestic state action. Arguably MEAs have been providing more guidance than actually binding rules.

The institutional structure of MEAs usually includes a secretariat, subsidiary bodies for implementation and technological assistance, as well as financial institutions or mechanisms. The agreements include provisions on new and additional resources for their implementation and technology transfer. Because of intellectual property rights, however, provisions on technology transfer are hardly implemented in practice. In the context of the UNFCCC, for example, there is impetus for technology transfer to enhance climate change mitigation by developing countries but intellectual property concerns by developed countries often preclude such action.

Financing issues also undermine the effectiveness of many MEAs. Recurring questions in this connection are: Who decides on what resources are needed? What instruments can be used: a fund, a trust, a market mechanism? Who runs it or decides on the allocation of funds? How do states access the resources and what projects are eligible? The Global Environment Fund (GEF), for example, is an independent financing organization, which serves as a financial mechanism to many MEAs such as the CBD, the Stockholm Convention on Persistent Organic Pollutants (POPs) and UN Convention to Combat Desertification (UNCCD).

The entry-into-force requirements of many MEAs impose extra criteria to ensure the effectiveness of the agreed goals and targets. The Kyoto Protocol, for example, requires ratification by at least 55 parties to the UNFCCC which, in addition, must add up to at least 55% of the total CO2 emissions for 1990 of parties included in Annex I to the Convention.

Under traditional treaty amendment procedures, states become bound by an amendment after depositing an official declaration accepting the amendment. Some atmospheric and marine MEAs also provide for a simplified process. The tacit amendment process integrated in the conventions of the International Maritime Organisation (IMO), for example, assumes that silence and absence of any action indicates acceptance of the amendment after a certain period of time. Under CITES, the listing and delisting of species takes place at a meeting of the parties. Decisions can be taken by a majority and bind all parties unless they object within a certain timeframe. Such techniques enhance the effectiveness of MEAs.

c) Compliance

MEAs usually do not contain enforcement mechanisms. They rather seek to facilitate and incentivise compliance through, for example, compliance committees that draw up action plans and recommendations on financial and technical assistance for the non-compliant state. National reports are used to monitor performance and enable the constant review of the effectiveness of the regime and its evolution. Reporting, however, is often poor and superficial.

Some MEAs might contain a punitive element. For example, the UNFCCC “enforcement branch” (as opposed to its “facilitative branch”) has the responsibility to determine consequences for parties that do not meet their commitments. In this case, however, sanctions result in increased targets over the ones not met while complete withdrawal from the regime (Kyoto Protocol) entails no penalty whatsoever (e.g. Canada).

CITES can respond to non-compliance with trade measures. If a designated national Management Authority fails to control the trade in endangered species on a legislative or regulatory basis in accordance with the Convention, the CITES related trade between this party and others can be effectively suspended.

In many cases, compliance with MEA provisions is also the result of peer pressure and scrutiny by civil society organisations.