Part I Introduction

1 Introduction and overview

1.1 EIAs and the process and substance of international law

Government officials, when required to make a decision that has potential consequences for the natural environment, are faced with the daunting task of having to integrate political, scientific and normative considerations into a unified decision-making process. Where the decision in question has the potential to impact the environment of another state, or where the possible impact is to a resource of global common concern, decision-makers may have to account for the political, scientific and normative views of affected states, affected persons within other states, and the wider international community, including international organizations and nongovernmental actors. How decision-makers account for these considerations, the conditions under which they are required to account for them and the modalities by which these considerations are brought into domestic decision-making processes, are among the questions this book seeks to address. My interest is with the operation of a set of institutionalized decision-making arrangements commonly referred to as environmental impact assessment (EIA).[1] In particular, this book is concerned with the employment of EIA processes in domestic decision-making processes to address environmental issues that have international dimensions.

[1] Throughout this book, I refer to the term "EIA," by which I mean the broader process of environmental impact assessment, including specified ways of determining the applicability of the process, the assessment itself, its dissemination, the participatory processes that occur through the process and any post-project monitoring process directly related to the EIA process. The term "EIA," as used here, also captures "strategic environmental assessment" (SEA), which is the application of assessment methodology to policies, plans and programs.

The central idea that animates the EIA process, that decisions affecting the environment should be made in light of a comprehensive understanding of their effects, is straightforward enough. Yet, when EIA was introduced in the United States in 1969,[2] it was considered a significant innovation to the domestic policy-making landscape.[3] Not only did EIA commitments require the *ex ante* consideration of the environmental consequences of proposed activities, but they opened up decision-making processes to affected members of the public, environmental interest groups and interested government agencies by providing for an information-rich and participatory environment for agency decision-making. Despite its evaluative mandate, domestic EIA legislation does not impose specific environmental standards on the decision-making process. Moreover, even where an EIA discloses that a proposed activity is likely to have a significant adverse impact on the natural environment, the proponent of that activity is not necessarily required to abandon the activity or mitigate its adverse environmental affects. It is this absence of required substantive outcomes that has led EIA supporters to herald it as creative and efficient, but has similarly led to critiques of the process as being costly, ineffective and hopelessly naive.[4]

Notwithstanding the controversy surrounding EIA in domestic legal settings, EIA commitments have been rapidly adopted by countries, both developed and developing, throughout the globe. It is now estimated that in excess of 100 countries have EIA legislation.[5] EIAs have been similarly embraced by international policy-makers. EIA processes at the international level were considered as early as the Stockholm Conference, a scant two years after their adoption by the US federal government in the National Environmental Policy Act. EIA commitments are now contained in international instruments addressing a broad array of environmental issues and geographical contexts.[6] So, for example, international EIA commitments relate to transboundary impacts, impacts to areas of the

[2] National Environmental Policy Act, 42 USC §§ 4321–4370(f) (NEPA).
[3] Robert Bartlett, "Impact Assessment as a Policy Strategy" in R. V. Bartlett, ed., *Policy Through Impact Assessment: Institutionalized Analysis as a Policy Strategy* (Westport, CT: Greenwood Press, 1986) 1 at 1.
[4] Ibid. at 3.
[5] *Indicators and Environmental Impact Assessment*, UNEP CBD SBSTTA, 7th Meeting, UNEP/CBD/SBSTTA/7/13 (2001); B. Sadler, *Environmental Assessment in a Changing World: Final Report of the International Book of the Effectiveness of Environmental Assessment* (Ottawa: CEAA, 1996).
[6] See the list of instruments in Appendix 1 below.

global commons, as well as to impacts that may occur wholly within a state, but have an element of common concern to the international community, such as biodiversity and climate change.

Despite the wide-ranging incorporation of EIA commitments into international instruments,[7] there has been little critical consideration of the role that EIA commitments are intended to play within international environmental governance structures.[8] As an ostensibly procedural commitment, EIA does not require, as a matter of legal obligation, decision-makers to reach outcomes that reflect the substantive rules and values of the international instrument in which the EIA commitment is found. In light of its apparent ambivalence toward outcomes, EIA has been understood as a planning tool, rather than as a means to promote outcomes consonant with particular environmental norms. This purely procedural view of EIA was succinctly captured in the domestic context by the US Supreme Court when it noted that US federal EIA legislation "merely prohibits uninformed – rather than unwise – agency action."[9] The US Supreme Court was right, of course, in the sense that EIA commitments do not require decision-makers to adhere to particularized environmental standards. Yet, there is a difficulty in conceiving of EIA commitments, whether in a domestic or international context, in entirely procedural terms in that such an understanding conflicts with the stated environmental objectives of EIA.[10] In light of this tension between the substantive ambitions and the procedural orientation of EIA commitments, the central objective of this book is to assess whether EIA, as a method of implementing international environmental objectives, is a sound policy strategy, and how EIA commitments may structure scientific, political and normative considerations in such a way as to influence substantive outcomes.

[7] Throughout this book, I refer to EIA "commitments," as opposed to obligations. The significance of this distinction is that the term "obligation" may denote that the instrument in question has a formally binding character. This book has a broader focus, as it includes international instruments beyond treaties, such as guidelines and declarations of international institutions. This approach is consistent with other studies of international environmental law. See, for example, David G. Victor, Kal Raustiala and Eugene B. Skolnikoff, eds., *The Implementation and Effectiveness of International Environmental Commitments* (Cambridge, MA: MIT Press, 1998).

[8] A notable exception is Timo Koivurova, *Environmental Impact Assessment in the Arctic: A Book of International Legal Norms* (Aldershot: Ashgate Publishing, 2002).

[9] *Robertson* v. *Methow Valley Citizens Council*, 490 US 332 at 350–351 (1989).

[10] See, for example, NEPA, at § 4331.

1.2 Proceduralism, transnationalism and integration

It may be helpful at this early stage to draw out some characteristics that EIA commitments share with international environmental law more generally, as a way to situate this book within the broader framework of international environmental governance. Consider, for example, the dispute between the United Kingdom and Ireland respecting the authorization by the United Kingdom of a plant to manufacture mixed oxide (MOX) fuel as part of an existing nuclear facility located at Sellafield, England, on the Irish Sea.[11] The activity in dispute uses spent fuel elements from nuclear reactors located outside the United Kingdom and transported to Sellafield chiefly via the Irish Sea. The spent fuel is reprocessed, producing, among other things, plutonium oxide. The plutonium oxide is then mixed with uranium oxide in the MOX plant, producing MOX pellets, which can then be placed in fuel rods for use in nuclear power reactors. Ireland's principal concerns with the proposal revolve around the potential for harm to the marine environment that may arise as a result of the transportation of radioactive materials in and out of Sellafield and by virtue of the release of radioactive isotopes into the Irish Sea from the MOX plant and related activities through either liquid or aerial discharges. As a result of its concerns, Ireland objected to the establishment of the MOX plant, and, when its diplomatic efforts failed, the Irish government commenced litigation against the United Kingdom under the Convention for the Protection of the Marine Environment of the North-East Atlantic, 1992[12] and under the United Nations Convention on the Law of the Sea (UNCLOS).

In objecting to the project, the Irish government is faced with a number of complications. First of all, while Ireland maintains that the authorization of the MOX plant by UK authorities contravenes the United Kingdom's obligation to prevent harm to the marine environment, the existing customary and treaty-based obligations respecting marine pollution contain few quantifiable standards by which permissible discharges can be distinguished from impermissible ones. For example, UNCLOS includes an obligation requiring states "to protect and preserve the marine environment"[13] and to take all measures necessary to prevent

[11] For a description of the MOX plant litigation, see Robin Churchill and Joanne Scott, "The MOX Plant Litigation: The First Half-Life" (2004) 53 ICLQ 643.

[12] Paris, September 22, 1992, 32 ILM 1072, in force March 25, 1998 (the OSPAR Convention).

[13] UNCLOS, Montego Bay, December 10, 1982, 21 ILM 1261 (1982), entered into force November 16, 1984, Art. 192.

pollution of the marine environment from land-based sources and activities under their jurisdiction,[14] but these prohibitions are not elaborated upon. In the place of clearly discernible standards as to what constitutes illegal pollution, UNCLOS turns to process, requiring parties to cooperate with one another through requirements for notification, disclosure and consultation.[15] The point here is not that there is no substantive obligation to avoid marine pollution, but rather that the obligation is couched in such abstract terms that a determination as to legality can only be made with reference to a known context. As a result, many of Ireland's arguments in the proceedings under UNCLOS relate to the failure of the UK government to comply with its procedural obligations, including the duty to conduct an EIA in accordance with international standards.[16]

Secondly, the dispute itself is not exclusively an international one, at least not in a formal sense. For example, the actual proponent of the MOX plant is a private commercial enterprise (albeit with close ties to the UK government), and as such is not recognized as properly subject to international law. Moreover, it is not clear that the interests being protected by the Irish government, such as the protection of the economic rights of the Irish fishing and tourism industries that would be affected by the release of radioactive material into the Irish Sea, are exclusively state interests. The non-state dimension of the dispute is evident by the involvement in the dispute of a number of environmental nongovernmental organizations, such as Greenpeace and Friends of the Earth, who brought proceedings of their own.[17] In addition, while the United Kingdom's adherence to its international legal responsibilities lies at the center of the dispute, the boundaries between national, regional and international law are blurred. The EIA process that Ireland views as insufficient is a process constituted under the domestic law of the United Kingdom. Ireland, in fact, participated in parts of the process

[14] Ibid., Art. 194.
[15] Ibid., Arts. 123, 197 and 206.
[16] The obligation to conduct an EIA is found in Art. 206 of UNCLOS, but Ireland also draws on the EIA requirements found in other international and European Community instruments, chiefly the Convention on Environmental Impact Assessment in a Transboundary Context, 30 ILM 802, Espoo, Finland, February 25, 1991, in force January 14, 1998 (the "Espoo Convention"), and the EC EIA Directive, EC, Council Directive 85/337, OJ 1985 L175/40, amended by EC, Council Directive 97/11, OJ 1997 L73/5, and by EC, Council Directive 03/35 (the "EIA Directive").
[17] *R. (on the application of Friends of the Earth Ltd and Greenpeace Ltd)* v. *Secretary of State for Environment, Food and Rural Affairs and the Secretary of State for Health* [2001] EWCA Civ 1847; [2002] 1 CMLR 21; [2001] 50 EGCS 91; [2002] Env LR 24; [2001] NPC 181.

in much the same manner as other private parties.[18] In maintaining that the EIA process was inadequate, the Irish government not only points to the requirements for EIAs contained in international instruments, but also raises European Community law.[19] There were even comparisons of the MOX plant approvals process with a similar approvals process in the United States. The point being that a domestic environmental regulatory process may be subject to normative influences that cross the national/international divide, the public/private divide, as well as the binding/non-binding divide. It is perhaps telling that the controversy over the MOX plant has generated legal proceedings in the domestic courts of the United Kingdom,[20] before the International Tribunal for the Law of the Sea,[21] two separate international arbitrations[22] and before the European Court of Justice.[23]

Finally, the dispute is further complicated by questions of a scientific nature and by questions that implicate a broader range of economic and security considerations. So, for example, a central issue is whether the potential environmental impacts of the MOX plant proposal, chiefly the release of radioactive isotopes, are likely to cause "substantial pollution" – a determination that acts as a legal threshold to trigger certain procedural obligations, including those relating to EIA. Such an assessment requires both a technical understanding of the potential for intended and unintended releases and a scientific understanding of the environmental impacts of the potential releases over time. Moreover, the determination of impacts cannot be separated from social and economic considerations. The transportation of spent nuclear fuels through the Irish Sea has raised issues linking national security with marine pollution. Concerns have also been raised in respect of the inadequacy of

[18] Discussed in Churchill and Scott, "The MOX Plant Litigation" at 644–645.
[19] EIA Directive.
[20] *Friends of the Earth* v. *Secretary of State for the Environment*.
[21] *MOX Plant Case (Ireland* v. *United Kingdom)*, Provisional Measures, 41 ILM 405 (2002).
[22] The two separate arbitration cases were commenced in the Permanent Court of Arbitration in relation to alleged breaches of the OSPAR Convention and UNCLOS, respectively. The OSPAR proceedings related to access to information requested by Ireland. A final award, rejecting Ireland's claim, was made in July 2003: *Ireland* v. *United Kingdom* (OSPAR Arbitration), Final Award July 2, 2003, www.pca-cpa.org. The proceedings under UNCLOS (the provisional measures were heard by the ITLOS) were suspended pending a determination by the European Court of Justice as to whether the European Court of Justice has exclusive jurisdiction over the dispute: *Ireland* v. *United Kingdom (MOX Plant Case)*, Order No. 4, November 14, 2003, www.pca-cpa.org.
[23] Case C-459/03, *Commission* v. *Ireland*, Judgment, May 30, 2006, finding that the European Court of Justice has exclusive jurisdiction.

the economic justification for the MOX plant itself, a requirement of the European nuclear regulatory authorities linked to domestic EIA requirements.[24] In light of the overlapping of environmental issues with economic and political policy objectives, decision-making processes must be designed to integrate these different and often competing considerations.

EIA obligations, which are at the center of the MOX plant litigation, respond to these complications by providing a procedural mechanism that allows decision-makers to consider the environmental consequences of their proposed activities within a highly contextualized framework. The result is a mechanism that brings together scientific, political and normative considerations in a decision-making process that is directed toward a range of transnational actors, whose inclusion in the process is determined not so much by their formal status, as by their potential to be impacted by the decision being made. If one accepts that the turn toward proceduralism, transnationalism and integration is not confined to the MOX plant dispute, but represents a broader trend in international environmental law, then international EIA requirements, which respond to these characteristics, are at the very least deserving of our attention.

As these characteristics and their relationship to EIA commitments underlie much of the discussion that follows, some elaboration of the significance of these characteristics for this book is warranted. First, by examining procedural commitments, I do not mean to marginalize or subordinate the role of substantive obligations and principles in international environmental law. Quite to the contrary, much of the analysis of international EIA commitments looks beyond the procedural requirements of EIA commitments to the relationship between EIA process and the substantive environmental goals of the international community. Since much of the focus of this book is on how the procedural requirements of EIA commitments structure interactions between interested actors and operationalize substantive norms and scientific findings, this book also looks in detail at the relationship between EIA requirements and other general principles of international environmental law, such as the harm principle, the duty to cooperate and the relationship of EIAs to the concept of sustainable development. In addition, I examine the development and structure of EIA processes in domestic law, which has clearly influenced the international obligations in both their development and implementation.

[24] Directive 96/27/Euratom, OJ 1996 L159/1.

The relationship between international EIA commitments and domestic EIA systems points to the transnationalism of EIA commitments.[25] As the MOX plant litigation indicates, while obligations to conduct EIAs may arise as an international commitment, the process itself is carried out in a domestic setting. The transnational nature of the process impacts who can participate, and it also provides an avenue for the projection of international norms into domestic decision-making processes. For example, part of Ireland's concern is to ensure that the geographic scope of the EIA includes environmental impacts to areas, such as the Irish Sea, that are beyond the territory of the United Kingdom, but also to ensure that the domestic EIA process accounts for substantive principles and standards of international law, such as the duty to prevent pollution to the marine environment.[26] In some cases the distinction between domestic and international norms within EIA processes is difficult to discern. Biological diversity and climate change norms, for example, are matters affecting the domestic environment, but have implications for the health of the global environment, and as such are considered as part of this book. It follows from this that there is a broad range of interactions that are germane to this book, including traditional (for international law) state-to-state interactions, interactions between the agencies of one state and the agencies of another, and interactions between non-governmental organizations and decision-makers where international environmental norms are being projected into domestic EIA processes.

Finally, the trend toward greater integration points to one of the central tensions within international environmental governance. Environmental decision-making inevitably requires choices to be made between competing values, often pitting economic goals against environmental considerations. The driving motivation behind the development of EIA processes was the recognition that environmental considerations were

[25] The term "transnational," as used in this book, adopts the definition as first put forward by Philip Jessup, who used the term "transnational law" to indicate those laws that regulate actions or events that transcend national boundaries, including interactions between both public and private actors. Transnational law in this regard has a broader scope than international law (at least as formally understood), which operates only between states. See Philip Jessup, *Transnational Law* (New Haven, CT: Yale University Press, 1956) at 2.

[26] *MOX Plant Case* (Annex VII Arbitration), Memorial of Ireland, paras. 7.50–7.57 (noting, for example, in para. 7.54, Ireland's concerns that the EIA was "deficient by reason of the fact that it failed to take *any* account of the material developments in English, EC and international law which occurred since 1993 for the protection of the marine environment of the Irish Sea").

far too often marginalized by agency decision-makers, who viewed environmental objectives as peripheral to their policy objectives. At a minimum, domestic EIA legislation requires agency decision-makers not to ignore the environmental consequences of their proposed activities. Consequently, EIA requirements were developed as a strategy for bureaucratic reform. While some view the process of evaluating environmental consequences as a value-free and technical exercise, it is evident that domestic EIA processes in their operation are more political, requiring decision-makers to choose between environmental and economic goals. At the international level, the division between development goals and environmental goals is further complicated by the demands of sovereignty, since the state of origin (that state in which the proposed activity is to be located) claims a sovereign right to economic development within its territory without interference, while the affected state claims a sovereign right to not be subjected to environmental harm. A similar, although less stark, division arises in relation to impacts to areas of the global commons (which states have a sovereign right to utilize) and to issues of global common concern. Fundamental to the operation of EIA processes as a means to mediate this tension is that neither side can ignore the reasonable claims of the other. Because neither proponent may claim a superior right, the reconciliation of these competing claims is inherently political. However, this book proceeds from the understanding that these political interactions are constrained by legal and scientific norms. The central argument that is presented in this book is that the way in which EIA commitments structure interactions, who can participate in those interactions, and how those commitments influence the scientific and normative inputs will shape the political processes in such a way that decision-makers will be drawn toward outcomes that are reflective of international environmental norms.

1.3 EIAs and compliance

Many of the claims that this book develops in relation to the role and operation of EIA commitments are framed with reference to explanations developed by international legal and international relations scholars of state compliance with international law. More precisely, I draw upon process-oriented approaches to international law and compliance, which emphasize the role of legal norms in interactions that are oriented toward persuasion rather than coercion.[27] The common thread

[27] Discussed below at ch. 6.3.