

Environmental Impact Assessments in International Law

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The purpose of this article is to assess what the current state of play with regard to environmental impact assessments (EIAs) is in international law. This question is posed because of the casual use of the term, and the often fundamental misunderstandings of what EIAs can and cannot do. This paper aims to clarify the current strength of EIAs in the international context, and provide guidance on how they may be applied.

IMPACT ASSESSMENT

Environmental impact assessment is a comprehensive process, which aims to promote sustainable development. It is used to ensure that human impacts upon the 'environment'¹ arising out of projects, programmes and policies are fully assessed by ensuring that their economic, social and environmental costs are fully disclosed before choices are made. Definitions of Environmental Impact Assessments (EIAs) and Strategic Environmental Assessments (SEAs) abound. The United Nations Environment Programme (UNEP) defines an EIA as 'an examination, analysis and assessment of planned activities with a view to ensuring environmentally sound and sustainable development'.² Alternatively, parties to the Convention on Biological Diversity (CBD)³ define an EIA as:

A process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human health impacts, both beneficial and adverse.⁴

Multiple definitions of EIAs can be found in national, regional or international legal instruments. Most of the national laws on this topic can be traced to the 1969 National Environmental Policy Act of the United States.⁵ Today, well over 100 countries require the utilization (but with differences between countries) of EIAs.⁶

Strategic Environmental Assessments (SEAs) expand upon EIAs by moving the focus from individual projects to overall policies, plans and programmes. Moreover, SEAs can focus on the cumulative impacts of policy choices, whereas EIAs tend to look at only the impacts of each isolated project. 'Strategic environmental assessment' is defined in the Kiev Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context⁷ as:

[T]he evaluation of the likely environmental, including health, effects, which comprises the determination of the scope of an environmental report and its preparation, the carrying-out of public participation and consultations, and the taking into account of the environmental report and the results of the public participation and consultations in a plan or programme.⁸

Although SEAs have not been used for as long and are not as well recognized as EIAs, they are becoming increasingly common in a number of countries.⁹

⁵ The National Environmental Policy Act of 1969, as amended. Pub. L. 91-190, 42 USC 4321-4347 (1 January 1970), as amended by Pub. L. 94-52 (3 July 1975), Pub. L. 94-83 (9 August 1975) and Pub. L. 97-258, para. 4(b) (13 September 1982).

⁶ Decision III/4, Guidelines on Good Practice, printed in *Report of the Third MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/6, 13 September 2004), Annex IV. See also Decision II/2, Practical Application of the Convention, printed in *Report of the Second MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/4, 7 August 2001), Annex II; J. Glasson *et al.*, *Introduction to Environmental Impact Assessment* (Routledge, 2003), at 36-37; and J. Weston, *Planning and Environmental Impact Assessment in Practice* (Longman, 1999).

⁷ The Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context (Kiev, 8 September 1992) ('Kiev Protocol').

⁸ *Ibid.*, Article 2(6).

⁹ See R. Therivel, *The Practice of Strategic Environmental Assessment* (Earthscan, 2002) and R. Therivel, *Strategic Environmental Assessment in Action* (Longman, 2004).

¹ Including human beings with their physical, material and cultural needs, wildlife and biodiversity, and ecosystems, including, *inter alia*, water, air and terrestrial ecosystems.

² *UNEP Goals and Principles of Environmental Impact Assessment* (UNEP, 16 January 1987). This was adopted in UNGA Resolution 42/184 (14 October 1987). It is reprinted in P. Birnie and A. Boyle, *Basic Documents on International Law and the Environment* (Oxford University Press, 2004), at 27. For the purposes of the Convention of Impact Assessment in a Transboundary Context (Espoo Convention) (Espoo, 25 February 1991), EIAs are defined as 'national procedure[s] for evaluating the likely impact of a proposed activity on the environment': see Espoo Convention, Article 1(vi).

³ Convention on Biological Diversity (CBD) (Rio de Janeiro, 14 June 1992).

⁴ Decision VI/7, Identification, Monitoring, Indicators and Assessment (UNEP/CBD/COP/6/20.00.92, 19 April 2002).

EIAS AS DOMESTIC, REGIONAL AND INTERNATIONAL OBLIGATIONS

Although it has been contended in three separate cases before the International Court of Justice, namely the 1995 *Nuclear Tests Case*,¹⁰ the 1997 *Gabčíkovo-Nagymaros Project*,¹¹ and the 2007 *Pulp Mills on the River Uruguay*,¹² that the obligation to conduct EIAs when dealing with potentially transboundary environmental impacts is customary international law, the Court has not yet explicitly ruled on this contention.¹³

¹⁰ ICJ 22 September 1995, *Request for An Examination of the Situation with Paragraph 63 of the Court's Judgment of 20 December 1974 in the Nuclear Tests (New Zealand v. France) Case*, [1995] ICJ Rep. 288. The issue of EIAs was first brought before the International Court of Justice in 1995, when New Zealand argued that underground nuclear tests being conducted by the French in the South Pacific could be polluting the region. It argued, *inter alia*, that France was obliged to undertake an EIA of the proposed nuclear tests according to accepted international standards and that, unless the assessment established that the tests will not give rise to radioactive contamination of the marine environment, France refrain from conducting the tests. However, to argue this point, the New Zealanders had to convince the Court that its claim was permissible, and the Court could adjudicate on the matter, via a small possible opening left in the Court's 1974 judgment in the *Nuclear Tests Case (New Zealand v. France)*, [1974] ICJ Rep. 253. The Court, however, found that the New Zealand case did 'not fall within the provisions of the said paragraph 63 and must consequently be dismissed'. Accordingly, the New Zealand contention that it was entitled to, *inter alia*, 'the benefit of a properly conducted Environmental Impact Assessment' and, therefore, that it was 'unlawful for France to conduct such nuclear tests before it has undertaken an Environmental Impact Assessment according to accepted international standards' was not addressed.

¹¹ ICJ 25 September 1997, *Hungary v. Slovakia (Gabčíkovo-Nagymaros Case)*, [1997] ICJ Rep. 7.

¹² ICJ 23 January 2007, *Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay)*, [2007] ICJ Rep 21. In the *Pulp Mills* case, Argentina argued that Uruguay had an obligation to, *inter alia*, prepare a full and objective environmental impact study. See para. 3(d).

¹³ The closest the Court came to this was with the *Gabčíkovo-Nagymaros* case (see n. 11 above), in which both Parties agreed (and the ICJ concurred) that new peremptory norms of environmental law, such as environmental assessment, had evolved, and these could be useful in the application of their existing treaty obligations. In particular, the Court was mindful that, in the field of environmental protection, vigilance and prevention are required on account of the often irreversible character of damage to the environment and of the limitations in mechanisms of reparation for certain types of environmental damage. The court pointed out that it was because of such difficulties that new norms and standards had been developed and set forth in a great number of instruments. Accordingly, it suggested that such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past (see paras 125–154). Although this conclusion was clearly encouraging, the Court, in urging the parties to go back to the negotiation table and pursue good faith negotiations, did not specifically rule on the content or application of the new norms of environmental law. The only guidance on this topic came from Vice-President Weeramantry, in a separate opinion, where he held that the duty of environmental impact assessment is not discharged merely by resort to such a

Nevertheless, it is likely that the obligation to conduct EIAs for projects with potentially transboundary impacts is customary. This assertion can be made due to the sheer magnitude and diversity of instruments recommending, or mandating, the use of EIAs. For example, Principle 17 of the 1992 Rio Declaration called for countries to utilize EIA as:

[A] national instrument, [to] be undertaken for proposed activities that are likely to have a significant adverse impact on the environment and are subject to a decision of a competent national authority.¹⁴

In a very similar manner, in signing the CBD, each party agreed, as far as possible, and as appropriate, to:

[I]ntroduce appropriate procedures requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects . . .¹⁵

To further this goal, the CBD has produced synthesis reports on the use of EIAs,¹⁶ placed the utilization of EIAs in all of its thematic work¹⁷ and reiterated their importance with regard to substantive (national) decision-making policies.¹⁸ The parties to the CBD¹⁹ have also adopted voluntary Guidelines Incorporating Biodiversity Related Issues into EIA legislation and/or processes,²⁰ and Voluntary Guidelines on Biodiversity Inclusive Environmental Impact Assessment.²¹

Ten years after the CBD was concluded, the Plan of Implementation from the 2002 World Summit on

procedure before the commencement of a project. The standards to be applied in such continuous monitoring are the standards prevalent at the time of assessment and not those in force at the commencement of the project.

¹⁴ Rio Declaration (A/CONF.151/5, 14 June 1992), Principle 17.

¹⁵ See CBD, n. 3 above, Article 14(a).

¹⁶ Decision IV/10, Measures for Implementing the CBD (UNEP/CBD/COP/4/27, 15 November 1998), at 120.

¹⁷ Recommendation IV/6, Incorporation of Biological Diversity Considerations into Environmental Impact Assessments (UNEP/CBD/SBSTTA/4/14, 19 April 2002), at 48. Accordingly, guidance to parties related to EIAs has been included in the programmes of work for agricultural biodiversity, inland water ecosystems, marine and coastal biological diversity and mountain biological diversity.

¹⁸ Decision V/18, Impact Assessment, Liability and Redress (UNEP/CBD/COP/5/23, 26 May 2000), at 148.

¹⁹ Recommendation VII/10, Further Development of Guidelines for Incorporating Biodiversity Related Issues into Environmental Impact Assessments (UNEP/CBD/COP/6/4, 20 February 2004), at 87.

²⁰ See Decision VI/7, n. 4 above. The Guidelines suggest that the fundamental components (each of which was fleshed out with further specific options for inclusion) for EIAs are: (1) screening to determine which projects require an EIA; (2) scoping to identify potential impacts and to derive terms of reference for impacts; (3) predicting and identifying likely impacts; (4) identifying mitigation measures; (5) deciding whether to proceed or not; and (6) monitoring and evaluating, to ensure consistency with given measures.

²¹ Decision VIII/28, Impact Assessment: Voluntary Guidelines on Biodiversity-Inclusive Impact Assessment (20 February 2004).

Sustainable Development (WSSD) suggested, in the quest for sustainable development, that relevant authorities, 'use environmental impact assessment procedures'.²² It was particularly recommended, as a means of implementation of the Plan, that the countries at the WSSD that could (and those that could not were to be assisted to):²³

Develop and promote the wider application of environmental impact assessments, inter alia, as a national instrument, as appropriate, to provide essential decision-support information on projects that could cause significant adverse effects to the environment.²⁴

In conjunction with the promotion of EIAs in the domestic sphere, there is also a long history of their utilization in the international arena. This process began with the 1971 Convention on Wetlands of International Importance ('Ramsar Convention').²⁵ Article 3 of the Ramsar Convention obliges the conservation of wetlands when change is 'likely.' In order to determine whether change is likely, a degree of prediction is required. The Ramsar parties have dealt with this need for prediction through the creation of recommendations for the utilization of EIAs. The general rule in this area was articulated in 1980 when the Ramsar parties recommended that when they (or development agencies) were involved in cases of large-scale wetland transformation, 'the decision is not taken until an assessment of all the values involved has been made'.²⁶ In subsequent meetings, the parties fleshed out what an EIA should consist of.²⁷ As a means to implement this decision, the parties established the target that *all* of its members should use EIAs when involved with matters related to the Convention.²⁸ In addition, the parties have consistently operated the practice of recommending to specific signatories when they should use EIAs. In fact, the first resolution from the first meeting, directed to some of the Baltic States, was to desist from proceeding with planned dams or industrial activities until appropriate research had demonstrated that no harmful effects

would result.²⁹ Since this point, the parties have directly recommended to particular signatories that they undertake EIAs for specific wetland sites, or particular wetland types (such as coastal areas),³⁰ that are threatened by developments.³¹

The second international convention to develop a systematic utilization of EIAs was the 1972 World Heritage Convention (WHC).³² This development is significant because although the WHC does not mention the utilization of EIAs, it has become the clear practice of the WHC Committee to request countries to complete EIAs before projects are undertaken that may have implications for WHC sites. This has been the practice of the WHC with developments involving tourism in the USA,³³ with pulp mills in Canada³⁴ and Russia,³⁵ helicopter flights in Peru³⁶ and tourism in South Africa³⁷ and Australia.³⁸ EIAs have been called for proposed hydro developments in the former Yugoslavia,³⁹ Honduras,⁴⁰ Niger,⁴¹ China⁴² and Senegal,⁴³ mines in Canada⁴⁴ and Russia,⁴⁵ power lines in Venezuela,⁴⁶ wind turbines in Slovenia⁴⁷ and

²⁹ See Recommendations adopted by the International Conference on the Conservation of Wetlands and Waterfowl at Ramsar, Iran (3 February 1971) in Final Act of the Ramsar Conference, Annex II, Recommendation 1 (Conservation of the Wadden Sea, north-western Europe).

³⁰ See Recommendation 6.8, Strategic Planning in Coastal Zones (27 March 1996); Resolution 7.21, Intertidal Wetlands (18 May 1996); Resolution 7.21, Intertidal Wetlands (18 May 1999); and Recommendation 6.8, Strategic Planning in Coastal Zones (27 March 1996).

³¹ Resolution 9.15, The Status of Sites on the Ramsar List of Wetlands of International Importance (15 November 2005), para. 27; Recommendation 3.8, The Azraq Oasis, Jordan (5 June 1987); Recommendation 4.9.3, The Azraq Oasis, Jordan (4 July 1990); Recommendation 6.17.3, The Azraq Oasis, Jordan (27 March 1996); Recommendation 6.17.4, Australian Ramsar Sites (27 March 1996); and Resolution 7.12, Sites in the Ramsar List (18 May 1999).

³² Convention on the Protection of the World Cultural and Natural Heritage (World Heritage Convention; or WHC) (Paris, 16 November 1972).

³³ Mammoth Cave National Park (WHC-02/CONF.202/25, 1 August 2002).

³⁴ Buffalo Park (CLT-90/CONF.004/13, 12 December 1990).

³⁵ Lake Baikal (WHC-03/27.COM/24, 10 December 2003) and (WHC-04/28.COM/26, 29 October 2004).

³⁶ Machu Picchu (WHC-94/CONF.003/16, 29 January 1995).

³⁷ St Lucia (WHC-03/27.COM/24, 10 December 2003).

³⁸ Great Barrier Reef (WHC-94/CONF.003/16, 31 January 1995).

³⁹ Durmitor National Park (WHC. SC-91/CONF.002/15, 12 December 1991).

⁴⁰ Rio Platano Reserve (WHC-98/CONF.203/18, 29 January 1999).

⁴¹ The Air and Tenere Natural Reserves (WHC-04/28.COM/26, 29 October 2004).

⁴² Three Parallel Rivers (WHC-05/29.COM/22, 9 September 2005).

⁴³ Djoudj National Bird Sanctuary (CC-80/CONF.017/4, 28 May 1980), at 3 and (CC-81/CONF.002/4, 20 July 1981), at 5.

⁴⁴ Nahanni Park (WHC-02/CONF.202/25, 1 August 2002) and (WHC-03/27.COM/24, 10 December 2003).

⁴⁵ Kamchatka Volcanoes (WHC-97/CONF.208/17, 27 February 1998), and Lake Baikal (WHC-04/28.COM/26, 29 October 2004).

⁴⁶ Canaima National Park (WHC-97/CONF.208/17, 27 February 1998).

⁴⁷ Historical Sanctuary of Machu Picchu (WHC-04/28.COM/26, 29 October 2004).

²² See Johannesburg Plan of Implementation ('JPOI'), *Report of the World Summit on Sustainable Development*, Johannesburg, South Africa, 26 August–4 September 2002 (UN Doc. A/CONF.199/L.1, 4 September 2002), Resolution 2, Annex, Section 19(e).

²³ *Ibid.*, Section 62(h).

²⁴ *Ibid.*, Section 136.

²⁵ The Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar, 2 February 1971).

²⁶ The parties to the Ramsar Convention have recommended that development agencies utilize EIAs for wetland projects before funding projects in their own work. See Recommendation 3.4, Responsibility of Development Agencies Towards Wetlands (5 June 1987). Development agencies were also called upon to support funding EIAs, even when they are not involved in the projects themselves.

²⁷ Recommendation 6.2, Environmental Impact Assessment (27 March 1996); and Resolution 7.16, Impact Assessment (18 May 1999).

²⁸ Resolution 7.27, The Convention's Work Plan 2000–2002 (18 May 1999), Annex.

roads in Mauritania,⁴⁸ Ecuador,⁴⁹ Indonesia⁵⁰ and Nepal.⁵¹

In a similar manner, the 1979 (Berne) Convention on the Conservation of Habitat and Wildlife in Europe⁵² has developed a strong utilization of EIAs in its work. This practice, derived from the Convention itself,⁵³ has led to calls for the use of EIAs for developments related to particular species, such as new fish farms and fresh water mussels,⁵⁴ the introduction of non-native species,⁵⁵ wind turbines⁵⁶ and overhead electric power cables.⁵⁷ Specific countries have also been directed to conduct EIAs before proceeding with planned projects that may impact upon species covered by the Convention.⁵⁸

In the same year that the Berne Convention was concluded, the Convention on the Conservation of Migratory Species of Wild Animals (CMS) also came into existence.⁵⁹ This regime has also come to value the utilization of SEAs and EIAs with regard to all developments that need to have their impacts

anticipated and predicted due to possible impacts on CMS listed Annex I species.⁶⁰ The parties to the CMS have also recognized the desirability of having SEAs and EIAs incorporated into the CMS subsidiary agreements. Such incorporation is clearly evident with the subsidiary instruments such as the Agreement for the Conservation of Albatross and Petrels⁶¹ and the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS).⁶² In relation to the latter, the ACCOBAMS Conservation Plan requires:

[I]mpact assessments to be carried out in order to provide a basis for either allowing or prohibiting the continuation or the future development of activities that may affect cetaceans or their habitat in the Agreement area, including fisheries, offshore exploration and exploitation, nautical sports, tourism and cetacean-watching, as well as establishing the conditions under which such activities may be conducted.⁶³

The Parties to the ACCOBAMS, like the Parties to the Agreement on Small Cetaceans of the Baltic and North Seas (ASCOBANS),⁶⁴ have actually gone further and linked the need to use EIAs with regard to particular potential problems, such as noise pollution.⁶⁵

The approach of the ACCOBAMS parties on this question closely coincides with a further noteworthy international instrument to call for the utilization of EIAs, which is the 1982 United Nations Convention on the Law of the Sea.⁶⁶ Article 206, which was broadly reiterated 30 years later at the 2002 WSSD,⁶⁷ stipulates:

⁴⁸ Banc d'Arguin National Park (WHC-02/CONF.202/25, 1 August 2002).

⁴⁹ Sangay National Park (SC-91/CONF.002/15, 12 December 1991) and (WHC-95/CONF.203/16, 31 January 1996).

⁵⁰ Lorentz (WHC-04/28.COM/26, 29 October 2004).

⁵¹ Chitwan (WHC-03/27.COM/24, 10 December 2003).

⁵² Convention on the Conservation of Habitat and Wildlife in Europe (Berne, 2 November 1979).

⁵³ All planning and development policies, including with the generation of pollution, of the parties must have regard to the habitats they are obliged to protect, so as to avoid or minimize as far as possible any deterioration of such areas. See *ibid.*, Articles 3(2) and 4(2).

⁵⁴ Recommendation No. 22 (1991), The Conservation of the Pearl Mussel and Other Freshwater Mussels, in *Report of the 11th Meeting of the Bern Convention* (T-PVS (91), 28 November 1991).

⁵⁵ Recommendation No. 57 (1997), The Introduction of Organisms Belonging to Non-Native Species into the Environment (CoE. (1997), 5 December 1997), in *Report of the 17th Meeting of the Bern Convention* (T-PVS (97), 5 December 1997), Appendix 8.

⁵⁶ Recommendation No. 109 (2004), On Minimizing Adverse Effects of Wind Power Generation on Wildlife, in *Report of the 24th Bern Meeting of the Bern Convention* (T-PVS, 3 December 2004), Appendix 3.

⁵⁷ Recommendation No. 109 (2004), On Minimizing Adverse Effects of Above Ground Electricity Transmission Facilities (Power Lines) on Birds, in *ibid.*, Appendix 4.

⁵⁸ Recommendation No. 83 (2000), The Conservation Status of Lake Vistonis and Lafra-Lafrouda Lagoon (Greece) in *Report of the 20th Meeting of the Bern Convention* (T-PVS (2000) 75, 1 December 2000), Appendix 7. See also Recommendation No. 84 (2000), The Conservation of Western Milos and in Particular the Milos Viper, *Macrovipera Schweizeri*, in *Report of the 20th Meeting of the Bern Convention* *ibid.*, Appendix 8; and Recommendation No. 96 (2002), The Conservation of Natural Habitats and Wildlife, Especially Birds, in Afforestation of Lowland in Iceland, in *Report of the 22nd Meeting of the Bern Convention* (T-PVS (2002) 13, 3 December 2002), Appendix 8; and Recommendation No. 112 (2004), on Hydroelectric Dams at Karahnjukar (Iceland) in *Report of the 24th Bern Meeting of the Bern Convention* (T-PVS (2004) 16, 3 December 2004), Appendix 6.

⁵⁹ Convention on the Conservation of Migratory Species of Wild Animals (Bonn, 23 June 1979) ('CMS').

⁶⁰ Resolution 7.2, Impact Assessment and Migratory Species (8 September 2002).

⁶¹ Agreement on the Conservation of Albatross and Petrels (Christchurch, 13 November 2006), Action Plan, at 3.1.

⁶² Agreement for the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area ('ACCOBAMS') (Monaco, 24 November 1996).

⁶³ Conservation Plan for Cetaceans in the ACCOBAMS Area (28 February 2002), Section 2, available at: <<http://www.accobams.org/2006.php/parties/documents/1>>.

⁶⁴ Agreement on Small Cetaceans of the Baltic and North Seas (Stockholm, 13 September 1991) ('ASCOBANS'). In particular, the parties called for the development of 'with military and other relevant authorities, effective mitigation measures including EIAs and relevant standing orders to reduce disturbance of, and potential physical damage to, small cetaceans'. See Resolution No. 4, Adverse Effects of Sound, Vessels and Other Forms of Disturbance on Small Cetaceans (12 December 2006), Annex 14, Preamble.

⁶⁵ Resolution 2.16, Assessment and Impact Assessment of Man-Made Noise, in *Report of the Second Meeting of the Parties to ACCOBAMS* (10 November 2004).

⁶⁶ United Nations Convention on the Law of the Sea ('UNCLOS') (Montego Bay, 10 December 1982).

⁶⁷ See JPOI, n. 22 above. This called for an improvement in the scientific understanding and assessment of marine and coastal ecosystems as a fundamental basis for sound decision making, at all levels. It also called for the promotion of 'the use of environmental impact assessments and environmental evaluation and reporting techniques, for projects or activities that are potentially harmful to the coastal and marine environments and their living and non-living resources'. See JPOI, n. 22 above, Section 36(c).

When States have reasonable grounds for believing that planned activities under their jurisdiction or control may cause substantial pollution of or significant and harmful changes to the marine environment, they shall, as far as practicable, assess the potential effects of such activities on the marine environment and shall communicate reports of the results . . . to the competent international organizations . . .⁶⁸

This requirement for assessment has been interpreted to require an EIA in a generic sense, in that it is discussed in the UNCLOS discussions in which it has been recommended that further work be conducted in this area.

The first explicitly regional instrument on EIAs can be traced to the EU's 1985 (and subsequently amended in 1997)⁶⁹ Directive on Environmental Impact Assessment of the Effects of Projects on the Environment.⁷⁰ This Directive has become well entrenched, and relatively well implemented by Member States.⁷¹ The World Bank made EIAs mandatory for all of its projects in 1989.⁷²

With respect to the regime derived from the Antarctic Treaty,⁷³ although the idea of EIAs can be found in a number of earlier recommendations, it was not until 1987 that the scope and considerations for an 'initial environmental evaluation' were clearly set down. In particular, such evaluations were called for in order to determine whether proposed activities might reasonably be expected to have a significant impact on the protected areas of the Antarctic. The importance of

EIAs was later incorporated into the 1991 Madrid Protocol. In particular, Article 8 of the Madrid Protocol stipulates that for proposed activities that do not have less than a minor or transitory impact, relating to scientific research programmes, tourism and all other governmental and non-governmental activities, including associated logistic support activities, procedures set out in a dedicated Annex for prior assessment of the impacts of those activities must be followed. The Annex contains a preliminary impact assessment, followed by an initial environmental evaluation (to see if it is minor or not), followed by a comprehensive environmental evaluation. The evaluation must then be forwarded to all parties, prior to the next meeting, and the Committee shall comment (and make recommendations) on it. The final project shall be closely monitored, including with key environmental indicators.⁷⁴

The first international instrument with EIAs at the centre of its business was the 1991 Convention on Environmental Impact Assessment in a Transboundary Context (the 'Espoo Convention'). The Espoo Convention entered into force in 1997. It has been ratified by 41 (largely western and eastern European) countries (and signed, but not ratified, by Russia and the USA). Although it is a United Nations Economic Commission for Europe (UNECE) Convention, the Convention was amended, in 2001, to allow States that are not members of the UNECE but that are members of the UN to accede to the Treaty. Serbia, Kazakhstan and Kyrgyzstan have joined in this regard. The parties to the Espoo Convention have gone on to create a Compliance Committee⁷⁵ and a database of transboundary EIAs.⁷⁶ It also assists delegates from developing countries, or those in economic transition, to attend

⁶⁸ The words 'competent international organizations' comes from Article 204(1). Such information should also be made available to suitably interested States. See UNCLOS, n. 66 above, Article 205.

⁶⁹ Council Directive 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, [1997] OJ L073/5.

⁷⁰ Council Directive 85/337/EEC of 27 June 1985 on the Assessment of the Effects of Certain Public and Private Projects on the Environment, [1985] OJ L175.

⁷¹ See *Report from the Commission to the European Parliament and the Council on the Application and Effectiveness of the EIA Directive (the 5th Year Review)* (European Commission, 2003), available at: <<http://ec.europa.eu/environment/archives/eia/eia-support.htm>>.

⁷² This policy, which has been updated, applies to all Bank-financed, assisted and/or implemented projects. This policy is seen as 'the backbone of the Bank's safeguard policy corpus'. The World Bank's environmental assessment policy is designed as a tool to ensure that projects proposed for Bank financing are environmentally sound, improve project performance and enhance their overall quality and sustainability. It does so by providing the rules and procedures that allow the flexibility to ensure that the project options under consideration are environmentally sound and sustainable. In many cases, the application of other important safeguard policies, such as those regarding involuntary resettlement, indigenous peoples, natural habitat, forestry, cultural heritage, safety of dams, agricultural pest management and international waterways, occur in concert with the Bank's environmental assessment policy. Information related to this (and other World Bank Directives in this area) is provided in World Bank, *Environmental Assessment Sourcebook* (World Bank, 1991).

⁷³ The Antarctic Treaty (Washington D.C., 1 December 1959).

⁷⁴ See Protocol on Environmental Protection to the Antarctic Treaty (Madrid, 4 October 1991) ('Madrid Protocol'), Article 8 in particular.

⁷⁵ The second session of the Meeting of the Parties (MOP) established an Implementation Committee. See Decision II/4, Review of Compliance, in *Report of the Second MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/4, 7 August 2001), Annex IV. This duly reported to the third MOP, and recommendations came from it. See Decision III/1, Review of Implementation, in *Report of the Third MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/6, 13 September 2004), Annex I.

⁷⁶ The database on EIA was established at the first MOP. See Decision I/5, Establishment of the Database on EIA, in *Report of the First MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/2, 10 November 1998), Annex V. It was continued at the second MOP. See Decision II/6, The Database on EIA, in *Report of the Second MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/4, 7 August 2001), Annex VI and expanded to include a networking facility. See Decision II/7, The Networking Facility Attached to the Database on EIA, in *Report of the Second MOP to the Convention on EIA in a Transboundary Context*, *ibid.*, Annex VII. The database was closed at the third MOP, and the data transferred to the Secretariat (to still be made available, and parties still urged to submit case studies). See Decision III/6, Information Exchange on EIA in a Transboundary Context, in *Report of the Third MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/6, 13 September 2004), Annex VI.

meetings.⁷⁷ The Espoo Convention is particularly notable because it constitutes a clear leap forward in international law in calling for EIAs within a transboundary, and not merely a domestic, context. This transboundary focus should not be underestimated, as the Convention effectively recognizes that many environmental projects and their effects originating from one country can have significant transboundary environmental impacts in other regions, and these effects have to be explicitly taken into account.

The second international instrument in the area of impact assessment is the Kiev Protocol. This Protocol followed a recommendation by the Second Meeting of the Parties to the Espoo Convention that EIAs in a transboundary context should also be applied at the strategic level.⁷⁸ The meaning of 'strategic level' is that parties evaluate the overall environmental consequences of their proposed plans, measures and instruments that may have significant environmental effects.⁷⁹ Although the Kiev Protocol has been signed by 38 countries, to date only six have ratified it, and, accordingly, it has not yet secured the 16 ratifications necessary for this instrument to come into force. In spite of this, a number of other instruments already promote SEAs. For example, one of the goals from the 2005 meeting of the Ramsar parties was for at least 50 signatories to be utilizing SEAs in the area of wetland management by 2008.⁸⁰ Likewise, the CMS has embraced the need for SEAs.

THE CORE OF IMPACT ASSESSMENT

Both forms of impact assessment aim to predict potential impacts of something that is planned but has not yet happened. In many ways, this act of prediction, prior to a final decision being made, is both anticipatory and precautionary in the sense that attempts are made to take stock of and to remove, modify or mitigate potential actions before any decisions to proceed are taken.⁸¹ Once these predictions

are made then they, along with additional considerations such as alternatives, mitigation and monitoring options, can be placed before decision makers (and the public) at an early stage, prior to any decision being made.⁸²

THE LIMITS OF IMPACT ASSESSMENT

Impact assessments are aids to decision making. They are one of a number of tools that decision makers can utilize. Although they are undertaken domestically, in a number of instances they may be commented upon by interested international bodies. EIAs are not the final word in decision-making processes, despite the fact that many commentators assume that they are (or should be) the definitive consideration when final decisions are made.⁸³ Due to this fact, and the realization that other considerations may trump even the most pressing environmental impacts, a number of commentators see impact assessments as a ruse.⁸⁴ Indeed, the only obligation upon decision makers in any context that is utilizing EIAs is that they follow certain procedures and 'examine impartially'⁸⁵ the information before them, which they are only obliged to take 'due account' of,⁸⁶ or 'duly [take] into account',⁸⁷ or 'take into consideration'.⁸⁸ The best that can be said in these circumstances is that decisions are made with as much quality information before them as possible.⁸⁹

After due consideration is taken of the information provided by the impact assessment, typically, the only obligation upon the decision makers is to explain 'the reasons and considerations on which [their decision] was based'.⁹⁰ For example, within the EU, once a decision is made and the public (and other interested States) are informed, the main reasons and considerations upon which the decision is based must be clear, as must the content of the decision and any conditions attached to it.⁹¹

Occasionally there are exceptions to this approach where EIAs have been called for from within a

⁷⁷ Decision III/11, Financial Assistance to Representatives of Countries in Transition, Non-Governmental Organizations and Countries Outside the Region, in *Report of the Third MOP to the Convention on EIA in a Transboundary Context*, *ibid.*, Annex XI.

⁷⁸ Decision II/9, Strategic Environmental Assessment, in *Report of the Second MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/4, 7 August 2001), Annex IX.

⁷⁹ See Kiev Protocol, n. 7 above, Preamble.

⁸⁰ See Resolution 9.8, Streamlining the Implementation of the Strategic Plan of the Convention 2003–2008. (Kampala, November 15, 2005), Strategy 1.2.

⁸¹ J. Holder, *Environmental Assessment: The Regulation of Decision Making* (Oxford University Press, 2005), at 13. See also J. Glasson, n. 6 above, at 3; and see Espoo Convention, n. 2 above, Preamble; and International Association for Impact Assessment (IAIA), *Biodiversity in Impact Assessment*, Special Publication Series No. 3 (IAIA, 2005).

⁸² See Espoo Convention, n. 2 above, Article 2(3); and UNEP Goals and Principles, n. 2 above, Principle 6.

⁸³ C. Wood, *Environmental Impact Assessment: A Comparative Review* (Prentice Hall, 2000), at 221–238.

⁸⁴ See J. Glasson, n. 6 above, at 13.

⁸⁵ See UNEP Goals and Principles, n. 2 above, Principle 5.

⁸⁶ See Espoo Convention, n. 2 above, Articles 2(1) and 6(1); and see Kiev Protocol, n. 7 above, Article 11.

⁸⁷ See CBD, n. 3 above, Article 14(b).

⁸⁸ See Council Directive 97/11/EC, n. 69 above, Article 8.

⁸⁹ See Espoo Convention, n. 2 above, Preamble.

⁹⁰ *Ibid.*, Article 6(2).

⁹¹ See Council Directive 97/11/EC, n. 69 above.

multilateral process. For example, although the Committee of the WHC will challenge a country if an EIA is slow in coming forward⁹² and it may even ask for copies of the EIA,⁹³ generally it does not challenge the results of the EIA unless it was flawed in its process or limited in its scope.⁹⁴ Accordingly, it is very rare that the Committee of the WHC requests a government to reconsider the merits of its choice after an EIA has been undertaken. In a similar manner, with the Berne Convention, the parties have been quick to point out when an EIA carried out by one of its parties has been inadequate and is in need of further input. This has been obvious with the Conference recommendations on, *inter alia*, motorways through the Kresna Gorge in Bulgaria,⁹⁵ national parks of Poland,⁹⁶ and the proposed navigable waterway through the Bystroe estuary in the Danube Delta in the Ukraine.⁹⁷ In all such instances, the parties to the Berne Convention set down very clearly all the steps that an appropriate EIA should contain. These recommendations are typically followed. If they are not, the parties may open a 'case file' on the site in question if they feel it is threatened. In other instances, such as with Greece, they have called for a certain position to be adopted if the EIA reaches certain conclusions.⁹⁸

EXEMPTIONS

It is important to note that in addition to the practical limits of what an impact assessment can achieve, not all projects, plans or proposals have to be subject to impact assessments. Indeed, some mechanisms (but not all) have clear exemptions to the EIA process, as different countries and regions consider some projects (or agencies) should not be publically examined under formal EIA/SEA terms.⁹⁹ For example, although rarely

used,¹⁰⁰ the EU Directive nevertheless allows for, in exceptional cases, the exemption of projects from its application. Notably, and as also reflected in the Kiev Protocol,¹⁰¹ projects serving national defence purposes are not covered.¹⁰² Both the EU¹⁰³ and the Kiev Protocol¹⁰⁴ also state that in other 'exceptional cases' other forms of assessment may be deemed appropriate, and countries (after clearly explaining why alternative forms of assessment are more appropriate) may exempt certain projects from impact assessment examination. Typically, such exemptions are, although often distasteful, accepted. However, this is not always the case. For example, in instances where an EIA has not been utilized the Committee of the WHC has been unusually blunt, for example, with the road building projects associated with the Royal Chitwan Park in Nepal, the Committee recommended that it be publicized:

[W]ith all concerned donors to fully understand how an infrastructure project impacting World Heritage could have been financed without an EIA and how the recurrence of such practice could be prevented in Nepal and elsewhere in the future.¹⁰⁵

SIGNIFICANCE, SCREENING AND APPENDICES

Impact assessments only apply to projects that may have a 'significant' impact. In such settings, unsurprisingly, the word 'significant' has become the threshold of determining whether impact assessment processes should apply, or not. Due to this importance of the term 'significant', a vast amount of material has been recorded over exactly what is, or is not, a 'significant' impact. This is primarily due to the fact that although instruments require impact assessments to be undertaken for projects that may have a significant impact, few of them clearly explain what the word 'significant' means.¹⁰⁶ Although some approaches of international significance, such as that of the World Bank, look at the project and its potential impacts before deciding

⁹² Western National Park of Niger (WHC-03/27.COM/24, 10 December 2003).

⁹³ National Park of Banc D'arguin (WHC-04/28.COM/26, 29 October 2004).

⁹⁴ Curonin Spit (28COM 15B.75, 21 July 2004).

⁹⁵ Recommendation No. 98 (2002), The Project to Build a Motorway Through the Kresna Gorge (Bulgaria) in *Report of the 22nd Meeting of the Bern Convention* (T-PVS (2002), 5 December 2002), Appendix 10.

⁹⁶ Recommendation No. 108 (2003), The Proposed Construction of the Via Baltica (Poland) in *Report of the 23rd Meeting of the Bern Convention* (T-PVS (2003) 24, 2 December 2003), Appendix 12.

⁹⁷ Recommendation No. 111 (2004) on the Proposed Navigable Waterway through the Bystroe Estuary (Danube Delta, Ukraine) in *Report of the 24th Bern Meeting of the Bern Convention* (T-PVS (2004) 16, 3 December 2004), Appendix 5.

⁹⁸ Recommendation No. 38 (1992), The Conservation of the Missolong Wetlands in Greece (7 December 1997). See also Recommendation No. 64 (1997), The Conservation of the Caretta Caretta in Kaminia, Greece, in *Report of the 17th Meeting of the Bern Convention* (T-PVS (97) 63, 5 December 1997), Appendix 17.

⁹⁹ See C. Wood, n. 83 above, at 108–124.

¹⁰⁰ See European Commission, *Clarification of the Application of Article 2(3) of the EIA Directive* (Office for Official Publications of the European Communities, 2006).

¹⁰¹ Kiev Protocol, n. 7 above, Article 4(5)(a).

¹⁰² *Ibid.*, Article 1(4).

¹⁰³ See Council Directive 97/11/EC, n. 69 above, Article 2(3).

¹⁰⁴ See Kiev Protocol, n. 7 above, Article 5(4).

¹⁰⁵ Royal Chitwan Park in Nepal (WHC-04/28.COM/26, 29 October 2004).

¹⁰⁶ A. Gilpin, *Environmental Impact Assessment: Cutting Edge for the 21st Century* (Cambridge University Press, 1996), at 5–8. See also J. Holder, n. 81 above, at 15–17.

the appropriate response,¹⁰⁷ others focus just on the areas where the projects may be undertaken. Thus, the Ramsar, World Heritage and Berne Conventions all call for EIAs when projects will impact upon the specific areas under their auspices. Likewise, the CBD has recommended that with regard to protected areas, the parties should:

Apply, as appropriate, timely environmental impact assessments to any plan or project with the potential to have effects on protected areas, and ensure timely information flow among all concerned parties to that end, taking into account [CBD Guidelines in this area].¹⁰⁸

Conversely, when dealing with the instruments where the primary focus is upon impact assessment processes (rather than particular areas), the typical practice is that projects which are to be subject to an EIA or SEA are screened via project type. Thus, if the project is of a certain identified type, they are presumed to have 'significant' impacts.¹⁰⁹ Therefore much of the discretion in the screening decision of whether a proposal should be subject to scrutiny or not is removed.

The approach of impact assessments being obligatory because of the type of the proposal is exemplified by the Espoo¹¹⁰ and the Kiev Protocols.¹¹¹ Likewise with the EU, the original Annex I of the EIA Directive had only nine (large-scale) industrial activities on it for which EIAs were obligatory. Those activities included, *inter alia*, large-scale power stations, crude oil refineries and trading ports which permit the passage of

vessels of over 1,350 tonnes. The Annex to the 1997 revision of the 1985 EU regulations increased the list on the Annex from nine to 21 projects (all of the large-scale industrial size), but added, *inter alia*, trading ports, piers for loading and unloading connected to land and outside ports (excluding ferry piers) which can take vessels of over 1,350 tonnes. Finally, the extraction of petroleum and natural gas for commercial purposes where the amount extracted exceeds 500 tonnes/day in the case of petroleum and 500,000 m³/day in the case of gas were also placed on the Annex.¹¹²

The second tier of screening for projects that should conduct impact assessments, for most regional or international instruments, is that Annex I of the EIA Directive, which contains a list of proposed projects that must have an EIA, is not treated as exhaustive. Accordingly, impact assessments may also be suitable for activities not listed in the given Annex I if they also have significant impacts. This approach is common with the Espoo¹¹³ and the Kiev Protocol, although with the latter there is a second Annex containing a list of a further 90 projects not included in Annex I, indicating that a SEA should be applied. Many of these pertain to projects with clear potential impacts on marine areas.¹¹⁴ Likewise, in the EU, projects in Annex II (which was updated and expanded)¹¹⁵ must be subject to an EIA if Member States consider, on a case-by-case approach, that the characteristics of the proposal cross certain 'thresholds', and thereby justify the utilization of an impact assessment.¹¹⁶

The decision of whether an EIA should be used for activities not in Annex I is potentially difficult. Accordingly, a third annex is often attached in order to determine whether the second annex should apply.

¹⁰⁷ The World Bank, after consideration of the type, location, sensitivity and scale of the project and the nature and magnitude of its potential environmental impacts, divides projects into categories. A proposed project is classified as Category A if it is likely to have significant adverse environmental impacts that are sensitive, diverse, or unprecedented. A potential impact is considered 'sensitive' if it may be irreversible (e.g. lead to loss of a major natural habitat) or raise specifically flagged issues such as indigenous peoples, natural habitats, or involuntary resettlement. A proposed project is classified as Category B if its potential adverse environmental impacts on human populations or environmentally important areas, including wetlands, forests, grasslands and other natural habitats, are less adverse than those of Category A projects. These impacts are site-specific, few if any of them are irreversible and in most cases migratory measures can be designed more readily than for Category A projects. The scope of assessment for a Category B project may vary from project to project, but it is narrower than that of Category A.

¹⁰⁸ Decision VII/28, Protected Areas (20 February 2004), Annex, Section 1.5.1.

¹⁰⁹ See R. Morgan, *Environmental Impact Assessment: A Methodological Approach* (Kluwer, 2001), at 93–113.

¹¹⁰ See Espoo Convention, n. 2 above, Article 2(2).

¹¹¹ Examples include agriculture, forestry, fisheries, energy, industry including mining, transport, regional development, waste management, water management, telecommunications, tourism, town and country planning or land use, trading ports and offshore and hydrocarbon production. See the Kiev Protocol, n. 7 above, Article 4(2).

¹¹² See Council Directive 97/11/EC, n. 69 above.

¹¹³ See Espoo Convention, n. 2 above, Article 2(5).

¹¹⁴ A large number of those with marine impacts, including, *inter alia*, extraction of minerals by marine or fluvial dredging, shipyards, construction of harbours and port installations, including fishing harbours, as far as not included in Annex I, trading ports, piers for loading and unloading connected to land and outside ports, as far as not included in Annex I, coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works, excluding the maintenance and reconstruction of such works, marinas and reclamation of land from the sea. See Kiev Protocol, n. 7 above.

¹¹⁵ The original Annex II contained 11 types of industries and their most obvious subsets. Thus, the category of 'infrastructure' included, *inter alia*, construction of harbours, including those for fishing and as marinas. The revised Annex II had a much larger list, and included projects such as aquaculture, reclamation of land from the sea, coastal work to combat erosion and maritime works capable of altering the coast through the construction, for example, of dykes, moles, jetties and other sea defence works (but excluding the maintenance and reconstruction of such works). See Council Directive 97/11/EC n. 69 above.

¹¹⁶ *Ibid.*, Article 4.

With the EU, Annex III selection criteria are divided into three sections. These are:

- the characteristics of the project, including, *inter alia*, its size, its pollution and the risk of accidents;
- the location of the project, with particular regard to the environmental sensitivity of geographical areas likely to be affected by projects, including their existing land use, and regenerative and absorptive capacity, with a direct focus on key habitats such as, *inter alia*, coastal zones and protected areas; and
- the characteristics of the potential impact in terms of its extent, magnitude, duration, likelihood and transfrontier possibilities.¹¹⁷

This approach, which is mirrored in the Kiev Protocol,¹¹⁸ is slightly different with the Espoo Convention, in that a decision (of whether an EIA should be conducted for a non-Annex I activity) can be forwarded to an independent commission of inquiry for advice.¹¹⁹ This commission uses similar criteria as noted above for the EU.¹²⁰

WHAT THE IMPACT ASSESSMENT MUST CONTAIN

ACCURATE INFORMATION

The need for reliable information in the EIA/SEA process cannot be understated. Without that information the exercise can quickly become pointless.¹²¹ Accordingly, most of the instruments in this area

carefully spell out exactly what minimum information¹²² is required and how it is to be acquired, including who is to pay for the provision of this information.¹²³

CLEARLY DEFINED POTENTIAL IMPACTS

The most important aspect of any gathered information is that which relates to the potential impact of the proposed project. Accordingly, all information on impacts should focus on the robust investigation of the indirect, secondary, cumulative, short-, medium- and long-term, permanent and temporary, positive and negative effects of the proposed project. Such analysis of impacts should also include an explicit indication of predictive methods and underlying assumptions, as well as the relevant environmental data used. It should also contain an identification of gaps in knowledge and uncertainties encountered in compiling the required information.¹²⁴ Finally, where appropriate, future research programmes should be established (or intensified) so that a continual flow of improved and refined information for the Parties on the topics at hand can be adduced.¹²⁵

ALTERNATIVES

A vast amount of literature has been generated on the discussion of 'alternatives' within impact assessments. This is not surprising, as the question of alternatives encapsulates a preventative approach. Moreover, the consideration of alternatives is often the decisive factor within an impact assessment, as an impact assessment is not just about projecting potential impacts, it is also about recognizing alternative options. Often this discussion of alternatives helps with the creation of 'win-win' scenarios, whereby the proposed project can proceed without having the same level of significant environmental impact as originally envisaged. Accordingly, a thorough discussion on alternatives is often considered to be one of the most basic requirements for impact assessments. For example,

¹¹⁷ *Ibid.*, Article 4(4).

¹¹⁸ When a party has to screen applications to determine whether plans and programmes referred to in Annex II apply, they are obliged to take into account, *inter alia*, the relevance of the proposal to promoting sustainable development, its influence on other plans and programmes, the probability, duration, frequency, reversibility, magnitude and extent (such as geographical area or size of population likely to be affected, and including transboundary considerations) of the possible impacts, and finally the 'degree to which the plan or programme will affect valuable or vulnerable areas including landscapes with a recognized national or international protection status'. See Kiev Protocol, n. 7 above, Article 5 and Annex III.

¹¹⁹ See Espoo Convention, n. 2 above, Appendix IV.

¹²⁰ This is determined by its size (typically they are large), its location (and whether they are located in or close to an area of special environmental sensitivity or importance, and if they are located close to international frontiers or would have significant transboundary effects) and its potential effects (with particular regard given to activities that are particularly complex and possess potentially adverse effects, including those giving rise to serious effects on human beings or on valued species or go beyond the carrying capacity of the environment. See Espoo Convention, n. 2 above, Appendix III.

¹²¹ See R. Morgan, n. 109 above, at 22–23.

¹²² See Kiev Protocol, n. 7 above, Article 7 and Annex IV. See also Council Directive 97/11/EC, n. 69 above, Articles 3 and 5 and Annex IV. For the Antarctic, see Resolution 1 (2005), Environmental Impact Assessment: Circulation of Information, in *Final Report of the 28th ATCM* (7 July 2005), at 27; and Resolution 6 (1995), Environmental Impact Assessment: Circulation of Information, in *Antarctic Treaty: Report of the Nineteenth Meeting* (12 August 1995), at 121–125. For the minimum information for the Ramsar EIAs, see Resolution 7.16, Impact Assessment (18 May 1999).

¹²³ Under a polluter pays regime, associated EIA costs should be paid for by the country of origin, and usually those proposing the activity. However, that may not always be the case. See Decision III/4, Guidelines on Good Practice, in *Report of the Third MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/6, 13 September 2004), Annex IV, paras 32–34.

¹²⁴ See Espoo Convention, n. 2 above, Appendix II.

¹²⁵ *Ibid.*, Article 9.

the UNEP Goals and Principles of EIA stipulate that an EIA should include, 'at a minimum . . . a description of the practical alternatives, as appropriate'.¹²⁶ This minimum requirement of a clear and comprehensive description of practical alternatives also features in the Espoo Convention, the Kiev Protocol, the EU instruments and the Madrid Protocol.¹²⁷

With such an approach, the question then becomes what is 'appropriate', and the debate tends to turn on whether a small or wide approach is to be taken to this question. While SEAs look at alternative policy options,¹²⁸ EIAs tend to look at alternatives through a much smaller prism, ranging from different technological options through to the actual 'no action' approach. For EIAs, the most common approach to examining the question of alternatives tends to be one of looking at other locations where the impacts of a proposal are less significant.¹²⁹ This is particularly so when dealing with sensitive areas such as key habitats or sites (or animals within them) with protected status.¹³⁰

MITIGATION

If there are no suitable alternatives to a proposal, the next best option is a strong examination of the possibilities of mitigation of the adverse environmental impacts of the proposed activity. Consideration of mitigation options, is, like alternatives, considered to be one of the minimum requirements for meaningful impact assessments.¹³¹ Mitigation options involve the establishment of possible measures that may be used to avoid, minimize or offset (including, in some instances, compensation) predicted adverse impacts.¹³² The need to consider this option is clear in all of the major international instruments.¹³³

MONITORING

Post-project analysis is an important part of impact assessment. If a project is allowed to proceed, the

monitoring of its impacts and any applied mitigation measures is typically viewed as essential to ensure that everything goes as planned. Failure to go to plan may mean that the project has to be halted, or consent for future projects on the same theme may have to be revisited.¹³⁴ For example, the Kiev Protocol obliges monitoring of the significant environmental effects of the implemented plans and programmes in order to, *inter alia*, identify unforeseen adverse effects at an early stage and to be able to undertake appropriate remedial action, if necessary.¹³⁵ Similar obligations exist with the Antarctica regime.¹³⁶ With Espoo, the Convention provides that the parties shall determine at the request of one of them whether a post-project analysis shall be carried out. In practice, both concerned parties may have different views as to whether such an analysis is necessary. If there is a difference of opinion on whether post-project analysis is required, consultations may be needed. Any post-project analysis undertaken shall include, in particular, surveillance of the activity and the determination of any adverse transboundary impact.¹³⁷ Such post-project analysis should include monitoring and review of:

- the impact of the project;
- compliance with the conditions attached to the consent for the project;
- the effectiveness of mitigation measures; and
- verification of past predictions in order to transfer experience to future activities of the same type.¹³⁸

MULTILATERAL COOPERATION AND NOTIFICATION

In most circumstances, the appropriate body to oversee an impact assessment study is the 'competent authority' within the borders of the country where the problem may originate.¹³⁹ However, the trend in this area, as reflected in the Espoo Convention and the Kiev Protocol,¹⁴⁰ is that bilateral, regional or multilateral cooperation may lead to a more appropriate

¹²⁶ See UNEP Goals and Principles, n. 2 above.

¹²⁷ See Resolution 4 (2005), Updating the Guidelines for Environmental Impact Assessment in the Antarctic, in *Final Report of the 28th ATCM* (7 July 2005); and Resolution 1 (1999), Guidelines for EIA in Antarctica, in *Antarctic Treaty: Report of the 23rd Meeting* (14 June 1999), at 55.

¹²⁸ See J. Holder, n. 81 above, at 162–164.

¹²⁹ See Espoo Convention, n. 2 above, Appendix II (b); and see Kiev Protocol, n. 7 above, Article 7 and Annex IV. See also Council Directive 97/11/EC, n. 69 above, Article 3 and Annex IV, section 5.

¹³⁰ See J. Holder, n. 81 above, at 14–16 and 148–162.

¹³¹ See UNEP Goals and Principles, n. 2 above, Principle 4.

¹³² See IAIA, n. 81 above, at 3.

¹³³ See Espoo Convention, n. 2 above, Appendix II (e). See also Council Directive 97/11/EC, n. 69 above, Article 3 and Annex IV, Section 3; and see Kiev Protocol, n. 7 above, Article 7 and Annex IV.

¹³⁴ B. Sadler and S. Brown, *Principles of Environmental Impact Assessment: Best Practice* (International Association for Impact Assessment, 2005), section 4. See also C. Wood, n. 83 above, at 240–257.

¹³⁵ See Kiev Protocol, n. 7 above, Article 12.

¹³⁶ Recommendation XIV-2, Human Impact on the Antarctic Environment: Environmental Impact Assessment, in *Antarctic Treaty: Report of the Fourteenth Meeting* (16 October 1987), at 71.

¹³⁷ See Espoo Convention, n. 2 above, Article 7.

¹³⁸ *Ibid.*, Appendix IV.

¹³⁹ *Ibid.*, Article 4(1).

¹⁴⁰ The Kiev Protocol recommends that each Party shall apply the Protocol in relevant international decision-making processes and within the framework of relevant international organizations. See Kiev Protocol, n. 7 above, Article 3(5).

location for the investigation of an EIA to be based, or its findings deliberated.¹⁴¹ This goal, which has been subsequently reiterated within the Espoo Convention,¹⁴² has a strong focus on the UNECE region¹⁴³ (and the associated UNECE conventions)¹⁴⁴ and the Balkan and Black Sea regions, in particular.¹⁴⁵ In this regard, the parties to the Espoo Convention called for serious consideration to be given to the creation of new arrangements, or enlarging the mandate of existing bilateral or institutional arrangements (for certain significant transboundary situations) in order to give full effect to the Convention.¹⁴⁶

One of the justifications for working within an Espoo context is that the Convention sets down clear guidelines on 'notification'. Notification is what UNEP recognized in 1987 as an essential process of reciprocal procedures, information exchange and consultation between States when proposed activities are likely to have transboundary effects on the environment of those States.¹⁴⁷ This idea of active and meaningful engagement with other countries that may be impacted upon by the projects originating from another State is also clear within the EU instruments,¹⁴⁸ the Kiev Protocol¹⁴⁹ and the CBD. In particular, the signatories to the CBD agreed to:

[P]romote, on the basis of reciprocity, notification, exchange of information and consultation on activities under their jurisdiction or control which are likely to significantly

affect adversely the biological diversity of other States or areas beyond the limits of national jurisdiction, by encouraging the conclusion of bilateral, regional or multilateral arrangements, as appropriate.¹⁵⁰

However, it is with the Espoo Convention and its pure focus on transboundary¹⁵¹ contexts that the importance of impacts beyond State boundaries, and trying to anticipate them, is stressed. Accordingly, the Espoo Convention has the most detailed obligations of notification¹⁵² for potential transboundary environmental impacts (including problems such as those potentially affecting migrating species)¹⁵³ from the party of origin to other States possibly affected.¹⁵⁴

PUBLIC PARTICIPATION

The final point that has to be borne in mind regarding impact assessments is the strong role that public participation must be given. In the impact assessment context, public participation may be defined as the involvement of individuals and groups, including relevant public authorities¹⁵⁵ that are positively or negatively affected by, or that are interested in, a proposed project, programme, plan or policy that is subject to a decision-making process. To help facilitate this goal, guidance on how to achieve meaningful public participation has been given by the parties to the Espoo Convention,¹⁵⁶ World Bank¹⁵⁷ and the Kiev

¹⁴¹ See Espoo Convention, n. 2 above, Article 8.

¹⁴² Decision II/1, Bilateral and Multilateral Cooperation, in *Report of the Second MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/4, 7 August 2001), Annex I.

¹⁴³ Decision II/8, Strengthening Subregional Cooperation, in *ibid.*, Annex VIII.

¹⁴⁴ See Decision II/5, Recent Developments and Links with other ECE Conventions, in *Report of the Second MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/4, 7 August 2001), Annex 5. See also, Decision III/3, Strengthening Cooperation with other UNECE Conventions, in *Report of the Third MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/6, 13 September 2004), Annex III.

¹⁴⁵ See Decision III/5, Strengthening Subregional Cooperation, in *Report of the Third MOP to the Convention on EIA in a Transboundary Context*, *ibid.*, Annex 5.

¹⁴⁶ See Espoo Convention, n. 2 above, Appendix VI.

¹⁴⁷ See UNEP Goals and Principles, n. 2 above, Preamble.

¹⁴⁸ With the EU, when a Member State is aware that a project is likely to have significant effects on the environment in another Member State (or where a Member State that is likely to be significantly affected so requests), the Member State in whose territory the project is intended to be carried out shall send to the affected Member State as soon as possible and no later than when informing its own public, a series of pieces of information (on the project and its possible impacts). The impacted State is then meant to have a reasonable chance to participate in the EIA procedure. The consultations between the Member States shall include, *inter alia*, the measures envisaged to reduce or eliminate such effects and shall agree on a reasonable time frame for the duration of the consultation period. See Council Directive 97/11/EC, n. 69 above, Article 7(1).

¹⁴⁹ See Kiev Protocol, n. 7 above, Article 9.

¹⁵⁰ See CBD, n. 3 above, Article 14(c).

¹⁵¹ 'Transboundary impact' means any impact, not exclusively of a global nature, within an area under the jurisdiction of a party caused by a proposed activity the physical origin of which is situated wholly or in part within the area under the jurisdiction of another party. See Espoo Convention, n. 2 above, Article 1(viii).

¹⁵² See Decision I/4, Format for Notification, in *Report of the First Meeting of the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context* (ECE/MPEIA/2, 10 November 1998), Annex IV.

¹⁵³ Decision III/4, Guidelines on Good Practice and on Bilateral and Multilateral Agreements Guidance on the Practical Application of the Espoo Convention (ECE/MPEI/6, 6 June 2004), Annex IV, paras 26 and 80.

¹⁵⁴ See Espoo Convention, n. 2 above, Articles 2(4) and 3.

¹⁵⁵ See Council Directive 97/11/EC, n. 69 above, Article 6(1).

¹⁵⁶ Decision II/3, Guidance on Public Participation in EIA in a Transboundary Context in *Report of the Second MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/4, 7 August 2001), Annex III. See also Decision III/8, Guidance on Public Participation in EIA in a Transboundary Context, in *Report of the Third Meeting of the Parties to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/6, 13 September 2004), Annex VIII.

¹⁵⁷ For Category A projects, the borrower consults these groups at least twice: (a) shortly after environmental screening and before the terms of reference for the EA are finalized; and (b) once a draft EA report is prepared. In addition, the borrower consults with such groups throughout project implementation as necessary to address EA-related issues that affect them. For more specific details, see Operational Procedures (for the World Bank), n. 72 above, paras 15–17.

Protocol.¹⁵⁸ Best practice in this area suggests that the participation should be as wide as possible.¹⁵⁹ However, since it is simply impractical to allow anyone with an interest, no matter where they are, to participate in impact assessments, the limits to participation are usually determined, as the EU explained, by the particular characteristics of the projects or sites concerned¹⁶⁰ and their potential impacts.¹⁶¹

Within the impact assessment processes, public participation is recognized as enhancing the transparency of decision-making processes, good governance, the sharing of information and, ultimately, the legitimacy of the entire process.¹⁶² Public participation also has strong associations with impact assessments because many sectors of international environmental law are increasingly overlapping with EIA requirements. This is particularly obvious with instruments such as the 1998 Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the Aarhus Convention)¹⁶³ Indeed, both the Espoo Convention and the Kiev Protocol expressly recognize the Aarhus Convention and, following the signature of the Aarhus Convention by the European Community in 1998, the Community revised its EIA Directive with a view to aligning public participation provisions within its impact assessment requirements to be in accordance with the Aarhus Convention.

The guiding principle in this area, most basically stated by UNEP, is that: 'before a decision is made on an activity, government agencies, members of the public, experts in relevant disciplines and interested groups should be allowed appropriate opportunity to comment on the EIA'.¹⁶⁴ Likewise, the parties to the Espoo agreed to, 'the establishment of an EIA procedure that permits public participation and preparation of the EIA documentation'.¹⁶⁵ The parties to the Espoo take this obligation so seriously that to help facilitate non-governmental organization (NGO) involvement in

the EIA processes, they even provide assistance for a number of NGOs to attend their meetings.¹⁶⁶ The parties to the Kiev Protocol, which place a high value on transparency,¹⁶⁷ have agreed to 'ensure early, timely and effective opportunities for public participation', including that by relevant NGOs, in the SEA process.¹⁶⁸ The World Bank also requires EIAs to involve project-affected groups and local NGOs,¹⁶⁹ as does the Ramsar Convention.¹⁷⁰ The CBD deems this issue so important that the parties have created additional guidelines¹⁷¹ for the conduct of cultural, environmental and social impact assessments so as to encourage the involvement of traditional, indigenous and/or local communities in the impact assessment process.¹⁷²

CONCLUSION

Environmental impact assessments are very well entrenched in domestic, regional and international law. They are particularly notable under the Ramsar, Berne, WHC, CBD and CMS Conventions. These environmental conventions are supplemented by a number of other instruments, ranging from the UNCLOS to the Espoo Convention and its Kiev Protocol, and in EU directives. Within all of these instruments, while EIAs are well established, SEAs have yet to gain the same level of recognition.

When dealing only with EIAs (and not SEAs), there is a strong case for comprehensive engagement with impact assessment mechanisms. This is especially so when dealing with transboundary impacts. A large part of the justification for engagement with these EIAs is because they are, most probably, already applicable for

¹⁵⁸ The Kiev Protocol clearly points out that certain groups should be included, such as environmental and health authorities (Article 6.2) and what public participation should be involved in, in addition to the actual report, such as the scoping (Article 5.3) and determination of what information should be included in the environmental report (Article 6.3). See Kiev Protocol, n. 7 above.

¹⁵⁹ See J. Holder, n. 81 above, at 22–23. See also A. Gilpin, n. 106 above, at 63–72.

¹⁶⁰ Council Directive 97/11/EC, n. 69 above, Article 6(3).

¹⁶¹ See Espoo Convention, n. 2 above, Article 2(6).

¹⁶² See P. Andre *et al.*, *Public Participation: International Best Practice Principles*, Special Publications Series, No. 4 (IAIA 2006). See also B. Sadler *et al.*, n. 134 above, 94.

¹⁶³ Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters (Aarhus, 25 June 1998).

¹⁶⁴ See UNEP Goals and Principles, n. 2 above, Principle 7.

¹⁶⁵ See Espoo Convention, n. 2 above, Article 2(2).

¹⁶⁶ Decision III/11, Financial Assistance to Representatives of Countries in Transition, Non-Governmental Organizations and Countries Outside the Region, in *Report of the Third MOP to the Convention on EIA in a Transboundary Context* (ECE/MPEIA/6, 13 September 2004), Annex XI.

¹⁶⁷ See Kiev Protocol., n. 7 above, Article 1(c).

¹⁶⁸ *Ibid.*, Preamble and Article 8.

¹⁶⁹ For the Bank's approach to NGOs, see World Bank, n. 72 above.

¹⁷⁰ Recommendation 6.2, Environmental Impact Assessment (18 May 1996).

¹⁷¹ The (Akwé Kon) Voluntary Guidelines for the Conduct of Cultural, Environmental and Social Impact Assessments Regarding Developments to take Place on, or Which are Likely to Impact on Sacred Sites and on Lands and Waters Traditionally Occupied or Used by Indigenous and Local Communities, in Decision VIII/16, Article 8(j) and Related Provisions (UNEP/CBD/COP/7/35, 20 February 2004). The cultural impact assessment is a process of evaluating the likely impacts of a proposed development on the way of life of a particular group or community, with full involvement of this group or community of people and possibly undertaken by this group or community of people. See *Report of the Third Meeting of the Ad Hoc Open Ended Inter-Sessional Working Group on Article 8(j) and Related Provisions* (UNEP/CBD/COP/7/7, 12 December 2003), at 29.

¹⁷² Decision VII/10, Article 8(j) and Related Provisions (UNEP/CBD/COP/6/20, 19 April 2002), Annex II.

most countries, due to their existing strong national, regional and international obligations on this question.

Despite the general obligation to conduct EIAs, it is important to realize that there are two limitations to them. First, certain projects may be exempted from impact assessment projects and, notably, this may include military projects or similar activities in the national interest. Second, most EIAs usually only have a 'bottom line' that the information which is gathered in the impact assessment process is 'taken into account'. That is, more often than not, the important outcome is that a participatory and robust process is undertaken and reliable information is gathered for decision makers before a decision is made that may have significant environmental impacts.

When EIAs are undertaken, they should only be based on projects that may have 'significant' impacts. Accordingly, it is always crucial to define how they interpret 'significant'. Guidance of what is deemed significant and, therefore, to justify the need for an EIA, should be assisted by the nature of the areas possibly impacted upon, such as with protected areas and/or critical habitats and the species that utilize these areas. In addition, the nature of the potential projects, when either identical or similar to the 'large-scale' projects recognized in specific appendices

attached to existing instruments, should give guidance on the need for an EIA. Alternatively, the characteristics of the project and its potential impacts, in addition to its location, may justify the need for an EIA.

Once it has been decided that an impact assessment should be undertaken, the information gathered must be robust. This information should cover, *inter alia*, clear analysis on the possible impacts (short- and long-term, direct and indirect), and detailed analysis on the topic of alternatives (in terms of technology, location and the 'no project' option). Finally, detailed monitoring requirements, including those which focus on evaluation of the impacts, compliance and success of the mitigation measures, should be included.

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