# Impact Assessment and the ACCOBAMS Agreement: Some Preliminary Considerations.

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# Executive Summary.

- 1. The directive to utilize Environmental Impact Assessments (EIAs) for projects which may have a significant environmental impact is very well entrenched in domestic, regional and international law.
- 2. The obligation to undertake EIAs is particularly strong in the ACCOBAMS region.
- 3. The obligation to utilize EIAs is also consistent with the commitments associated with the ACCOBAMS.
- 4. However, the Parties to the ACCOBAMS do not appear to be utilizing EIAs in this area.
- 5. There is a lack of clear guidance about how EIAs should be used in the ACCOBAMS context

#### The Parties to the ACCOBAMS need to note that,

- 6. EIAs are only a process, by which all of the information is placed before decision makers before conclusions are reached.
- 7. Moreover, certain projects can be excluded from having impact assessments.

#### The Parties to the ACCOBAMS need to decide,

- 8. What they consider to be a 'significant impact' (in terms of either impact upon cetaceans, or specific project type) which would therefore trigger the need for an EIA.
- 9. Whether some projects should be excluded from being externally assessed.
- 10. The degree to which the Parties, collectively, can comment on the EIAs undertaken (or omitted) by sovereign countries in terms of both the merits of the sovereign decision (and asking sovereign governments to reconsider their decisions), and/or the due process of the EIA procedure.
- 11. At a minimum, if comment on the due-process of EIA decisions is utilised, the Parties should place emphasis upon,
- Clear and robust examination of potential impacts,
- Alternatives to the proposed developments, (such as alternative sites) so that the impacts could be avoided or reduced,
- Mitigation options if alternative options are not available,
- Monitoring of the projects, if the consent to proceed is given.

## I. Impact Assessment.

1. Impact assessment is a comprehensive process and assessment tool which aims to promote sustainable development. It is used to ensure that human impacts upon the 'environment' 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 EIAs as, 'an examination, analysis and assessment of planned activities with a view to ensuring environmentally sound and sustainable development'. Alternatively, Parties to the Convention on Biological Diversity (CBD) define EIAs 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.<sup>4</sup>

- 2. Multiple definitions of EIAs can be found in national, regional or international legal instruments. All of the national laws on this topic can be traced to the 1969 National Environmental Policy Act of the United States.<sup>5</sup> In the 21<sup>st</sup> Century, well over 100 countries require the utilization (but with differences between countries) of EIAs.<sup>6</sup>
- 3. Strategic Impact Assessments expand upon Environmental Impact Assessments 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' has been defined, in the (Kiev) Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context<sup>7</sup> 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

<sup>2</sup> Including humans with their physical, material and cultural needs, wildlife and biodiversity, and ecosystems, including, inter alia, water, air and terrestrial ecosystems.

<sup>3</sup> UNEP Goals and Principles of Environmental Impact Assessment. See UNGA Resolution 42/184 (1987). It is reprinted in Birnie, P & Boyle, A. (2004). Basic Documents on International Law and the Environment. (Oxford University Press, Oxford). 27. For the purposes of the Espoo Convention, EIAs are defined as 'national procedure[s] for evaluating the likely impact of a proposed activity on the environment'. Espoo. Article 1 (vi).

<sup>4</sup> Decision VI/7. Identification, Monitoring, Indicators and Assessment. UNEP/CBD/COP/6/20.00.92.

<sup>5</sup> The National Environmental Policy Act of 1969, as amended. Pub. L. 91-190, 42 U.S.C. 4321-4347, January 1, 1970, as amended by Pub. L. 94-52, July 3, 1975, Pub. L. 94-83, August 9, 1975, and Pub. L. 97-258, § 4(b), Sept. 13, 1982.

<sup>6</sup> Decision III/4. Guidelines on Good Practice. Printed as Annex IV of Report of the Third MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/6. Sep 13, 2004. See Decision II/2. Practical Application of the Convention. Printed as Annex II to Report of the Second MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/4. Aug 7, 2001. Glasson, J. et al. (2003). Introduction to Environmental Impact Assessment. (Routledge, London). 36-37. Weston, J. (1999). Planning and Environmental Impact Assessment in Practice (Longman, New York).

<sup>30-37.</sup> Weston, J. (1999). Planning and Environmental Impact Assessment in Practice (Longman, New York)

<sup>7</sup> ECE/MP.EIA/2003/2.

taking into account of the environmental report and the results of the public participation and consultations in a plan or programme.<sup>8</sup>

4. Although SEAs are not as long-standing or as well recognized as EIAs, they are becoming increasingly common in a number of countries.<sup>9</sup>

## II. EIAs as Domestic, Regional and International Obligations.

5. Although it has been contended in three separate cases before the International Court of Justice, namely the 1995 Nuclear Tests (NZ v. France), 10 the 1997 Gabčíkovo-Nagymaros Project (Hungary/Slovakia), 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 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 EIAs 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.

<sup>8</sup> SEA Protocol. Article 2 (6).

<sup>9</sup> See Therivel, R. (2002). The Practice of Strategic Environmental Assessment. (Earthscan, London). Therivel, R. (2004). Strategic Environmental Assessment in Action (Longman, London).

<sup>10</sup> 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. Order of 22 September. 1995. 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. They argued, inter alia, that that France was obliged to
undertake an EIA of the proposed nuclear tests according to accepted international standards and that, unless the assessment establishes 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 their 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). 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 New Zealand was entitled to, inter alia, 'the benefit of a properly conducted
Environmental Impact Assessment' and therefore, 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.

<sup>11</sup> Case Concerning Gabcikovo-Nagymaros Project (Hungary/Slovakia). September 25, 1997.

<sup>12</sup> Case Concerning Pulp Mills on the River Uruguay (Argentina v. Uruguay). Jan 23, 2007. In the Pulp Mills case, Argentina argued that Uruguay had an obligation to, inter alia, prepare a full and objective environmental impact study. See paragraph 3 (d).

<sup>13</sup> The closest the Court came to this was with the Hungary v. Slovakia case, in which both Parties agreed (and the ICJ to 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 inherent with mechanism 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, they 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 Paragraphs 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 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.

6. 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 ... <sup>14</sup>

- 7. To further this goal, the CBD has produced synthesis reports on the use of EIAs,<sup>15</sup> placed the utilization of EIAs in all of its thematic work,<sup>16</sup> and reiterated their importance with regard to substantive (national) decision making policies.<sup>17</sup> The Parties to the CBD<sup>18</sup> have also adopted voluntary Guidelines Incorporating Biodiversity Related Issues into EIA Legislation and/or processes,<sup>19</sup> and Voluntary Guidelines on Biodiversity Inclusive Environmental Impact Assessment.<sup>20</sup>
- 8. Ten years after the CBD was concluded, the Plan of Implementation from the 2002 World Summit on Sustainable Development (WSSD) suggested, in the quest for sustainable development, that relevant authorities, 'use environmental impact assessment procedures'. 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, 22

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.<sup>23</sup>

9. 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). 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

<sup>14</sup> CBD. Article 14 (a).

<sup>15</sup> Decision IV/10. Measures for Implementing the CBD. UNEP/CBD/COP/4/27.pp.120.

<sup>16</sup> Recommendation IV/6. Incorporation of Biological Diversity Considerations Into Environmental Impact Assessments. UNEP/CBD/SBSTTA/4/14. pp.48. Accordingly, guidance to Parties related to EIAs has been included in the programmes of work for agricultural biodiversity (Decision V/5), forest biological diversity (Decision VI/22), biological diversity of inland water ecosystems, (Decision VII/4), marine and coastal biological diversity, (Decision VII/5) and mountain biological diversity (Decision VII/27).

<sup>17</sup> Decision V/18. Impact Assessment, Liability and Redress. UNEP/CBD/COP/5/23. pp.148.

<sup>18</sup> Recommendation VII/10. Further Development of Guidelines for Incorporating Biodiversity Related Issues into Environmental Impact Assessments. UNEP/CBD/COP/6/4, pp.87.

<sup>19</sup> Decision VI/7. Supra note 3. The Guidelines suggested the fundamental components (each of which was fleshed out with further specific options for inclusion) for EIA 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. Predictions and identifications of likely impacts. 4. Indentification of mitigation measures. 5. Deciding whether to proceed or not. 6. Monitoring and evaluating, to ensure consistency with given measures.

<sup>20</sup> Decision VIII/28. Impact Assessment: Voluntary Guidelines on Biodiversity-Inclusive Impact Assessment.

<sup>21</sup> Plan of Implementation. Section 19 (e).

<sup>22</sup> Plan of Implementation. Section 62 (h).

<sup>23</sup> Plan of Implementation. Section 136.

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)<sup>24</sup> 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'. In subsequent meetings, the Parties fleshed out what an EIA should consist of.<sup>25</sup> As a means to implement this decision, the Ramsar Parties established the target that *all* of its members should use EIAs when involved with matters related to the Convention.<sup>26</sup> 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.<sup>27</sup> 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),<sup>28</sup> that are threatened by developments.<sup>29</sup>

10. The second international convention to develop a systematic utilization of EIAs is the 1972 World Heritage Convention (WHC). 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 which may have implications for WHC sites. This has been the practice with developments in the United States, 30 with pulp mills in Canada 11 and Russia, 12 helicopter flights in Peru 13 and tourism in South Africa 14 and Australia. 15 EIAs have been called for proposed hydro developments in the former Yugoslavia, 16 Honduras, 17 Niger, 18 China, 19 and Senegal, 10 mines in Canada 11 and Russia, 14 power lines in Venezuela, 14 wind turbines in Slovenia, 14 and roads in Mauritania, 15 Ecuador, 16 Indonesia, 17 and Nepal. 18

<sup>24</sup> The Parties to the Ramsar have recommended that development agencies, both utilise EIAs for wetland projects before funding projects in their own work Recommendation 3.4. Responsibility of Development Agencies Towards Wetlands. (1987, Regina). Development agencies were also called upon to support funding EIAs. even when they are not involved in the projects themselves.

<sup>25</sup> Recommendation 6.2. Environmental Impact Assessment, (1996, Brisbane), Resolution 7.16. Impact Assessment, (1999, San Jose),

<sup>26</sup> Resolution 7.27. The Convention's Work Plan 2000-02. (1999, San Jose). Annex. Work Plan.

<sup>27</sup> Final Act of the Ramsar Conference. Annex II. Recommendations adopted by the International Conference on the Conservation of Wetlands and Waterfowl at Ramsar, Iran, 3 February 1971. Recommendation 1. Conservation of the Wadden Sea, north-western Europe.

<sup>28</sup> Recommendation 6.8. Strategic Planning in Coastal Zones. (1996, Brisbane). Resolution 7.21. Intertidal Wetlands. (1996, San Jose). Resolution 7.21. Intertidal Wetlands. (1996, San Jose). Recommendation 6.8. Strategic Planning in Coastal Zones. (1996, Brisbane).

<sup>29</sup> Resolution 9.15. The Status of Sites on the Ramsar List of Wetlands of International Importance. (2005, Kampala). Paragraph 27. Recommendation 3.8. The Azraq Oasis, Jordan. (1987, Regina). Recommendation 4.9.3. The Azraq Oasis, Jordan. (1990, Montreux). Recommendation 6.17.3. The Azraq Oasis, Jordan. (1996, Brisbane). Resolution 7.12. Sites in the Ramsar List. (1999, San Jose).

<sup>30</sup> Mammoth Cave National Park. UNESCO. (2002). 26th Session of the WHC. WHC-02/CONF.202/25. Aug 1, 2002. 37.

<sup>31</sup> Buffalo Park. UNESCO. (1990). 14th Session of the WHC. CLT-90/CONF.004/13. Dec 12, 1990. 10.

<sup>32</sup> Lake Baikal. UNESCO. (2003). 27th Session of the WHC. WHC-03/27.COM/24. Dec 10, 2003. 42. UNESCO. (2004). 28th Session of the WHC. WHC-04/28.COM/26. Oct 29. Decision 28 COM 15B.22.pp87.

<sup>33</sup> Machu Picchu, UNESCO, (1995), 18th Session of the WHC, WHC-94/CONF,003/16, Jan 31, 1995, 23

<sup>34</sup> St Lucia. UNESCO. (2003). 27th Session of the WHC. WHC-03/27.COM/24. Dec 10, 2003. 34

<sup>35</sup> Great Barrier Reef. UNESCO. (1995). 18th Session of the WHC. WHC-94/CONF.003/16. Jan 31. 1995. 19.

<sup>36</sup> Durmitor National Park. UNESCO. (1991). 15th Session of the WHC. SC-91/CONF.002/15. Dec 12, 1991. 10.

<sup>37</sup> Rio Platano Reserve.. UNESCO. (1998). 22nd Session of the WHC. WHC-98/CONF.203/18. Jan 29, 1999. 23.

<sup>38</sup> UNESCO, (2004), 28th Session of the WHC, WHC-04/28,COM/26, Oct 29, Decision 28 COM 15B.1.

<sup>39</sup> Decision 29 COM 7B.7, and the Three Parallel Rivers.

- 11. In a similar manner, the 1979 Berne Convention on the Conservation of Habitat and Wildlife in Europe has developed a strong utilisation of EIAs in its work. This practice, derived from the Convention itself,<sup>49</sup> has led to calls for the utilisation of EIAs for developments related to particular species, such as new fish farms and fresh water mussels,<sup>50</sup> the introduction of non-native species,<sup>51</sup> wind turbines,<sup>52</sup> and overhead electric power cables.<sup>53</sup> Specific countries have also been directed to conduct EIAs before proceeding with planned projects which may impact upon species covered by the Convention.<sup>54</sup>
- 12. In the same year as the Berne Convention was concluded, the Convention on Migratory Species (CMS) also came into existence. 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 their possible impacts of CMS listed Appendix I species. 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 Petrels and the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS). In relation to the latter, the ACCOBAMS Conservation Plan requires,

40 UNESCO. (1980). 4th Session of the WHC. CC-80/CONF.017/4. May 28, 1980. pp.3. UNESCO. (1981). 5th Session of the WHC. CC-81/CONF.002/4. July 20, 1981. pp.5.

- 41 Nahanni Park. UNESCO. (2002). 26th Session of the WHC. WHC-02/CONF.202/25. Aug 1, 2002. 28. UNESCO. (2003). 27th Session of the WHC. WHC-03/27.COM/24. Dec 10, 2003. 40.
- 42 Kamchatka Volcanoes. UNESCO. (1997). 21st Session of the WHC. WHC-97/CONF.208/17. Feb 27, 1998. 22. Lake Baikal. UNESCO. (2004). 28th Session of the WHC. WHC-04/28 COM/26. Oct 29. Decision 28 COM 15B 22.pp87.
- 43 Canaima National Park UNESCO (1997) 21st Session of the WHC WHC-97/CONF 208/17 Feb 27 1998 22-23
- 44 Decision 29 COM 15B.28. UNESCO. (2004). 28th Session of the WHC. WHC-04/28.COM/26. Oct 29. Decision 28 COM 15B.22.8p91.
- $45\ Banc\ d'Arguin\ National\ Park.\ UNESCO.\ (2002).\ 26 th\ Session\ of\ the\ WHC.\ WHC-02/CONF.202/25.\ Aug\ 1,\ 2002.\ 33.$
- 46 Sangay National Park. UNESCO. (1991). 15th Session of the WHC. SC-91/CONF.002/15. Dec 12, 1991. 7-18. UNESCO. (1996). 19th Session of the WHC. WHC-95/CONF.203/16. Jan 31. 1996. 9
- 47 Lorentz. UNESCO. (2004). 28th Session of the WHC. WHC-04/28.COM/26. Oct 29. Decision 28 COM 15B.10.pp80
- 48 Chitwan. UNESCO. (2003). 27th Session of the WHC. WHC-03/27.COM/24. Dec 10, 2003. 36.
- 49 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 minimise as far as possible any deterioration of such areas. Berne Convention. Article 3 (2) and 4 (2).
- 50 Recommendation No. 22. (1991). The Conservation of the Pearl Mussel and Other Freshwater Mussels.
- 51 Recommendation No. 57. The Introduction of Organisms Belonging to Non-Native Species into the Environment. CoE. (1997). Report of the 17th Meeting of the Bern Convention. T-PVS (97). 63. Appendix 8.
- 52 Recommendation No. 109. (2004). On Minimizing Adverse Effects of Wind Power Generation on Wildlife. Report of the 24th Bern Meeting of the Bern Convention. T-PVS (2004). 16. Appendix 3.
- 53 Recommendation No. 109. (2004). On Minimizing Adverse Effects of Above Ground Electricity Transmission Facilities (power lines) on Birds. Report of the 24th Bern Meeting of the Bern Convention. T-PVS (2004). 16. Appendix 4.
- 54 Recommendation No. 83 (2000). The Conservation Status of Lake Vistonis and Lafra-Lafrouda Lagoon (Greece). Report of the 20th Meeting of the Bern Convention. T-PVS (2000). 75. Appendix 7. Recommendation No. 84 (2000). The Conservation of Western Milos and in Particular the Milos Viper, Macrovipera Schweizeri. Report of the 20th Meeting of the Bern Convention. T-PVS (2000). 75. Appendix 8. Recommendation No. 96. (2002). The Conservation of Natural Habitats and Wildlife, Especially Birds, in Afforestation of Lowland in Iceland. Report of the 22nd Meeting of the Bern Convention. T-PVS (2002). 13. Appendix 8. Recommendation No. 112. (2004). On Hydroelectric Dams at Karahnjukar (Iceland). Report of the 24th Bern Meeting of the Bern Convention. T-PVS (2004). 16. Appendix 6.
- 55 Resolution 7.2. Impact Assessment and Migratory Species. (COP 7, 2002, Bonn)
- 56 ACAP. Action Plan. 3.1.

[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.<sup>57</sup>

13. The Parties to the ACCOBAMS, like the Parties to the ASCOBANS, <sup>58</sup> have actually gone further and linked the need to use EIAs with regard to particular potential problems, such as noise pollution. <sup>59</sup> Building on this development, the 4<sup>th</sup> Scientific Committee of the ACCOBAMS, in 2006, recommended,

[T]he effects of underwater noise should be included in Environmental Impact Assessments and in the consequent design of mitigation procedures for any activity with the potential for introducing noise underwater. <sup>60</sup>

14. 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. Article 206, which was broadly reiterated 30 years later at the 2002 WSSD, <sup>61</sup> and stipulated,

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... 62

15. The first explicitly regional instrument on EIAs can be traced to the European Union's 1985 (and subsequently amended in 1997)<sup>63</sup> Directive on Environmental Impact Assessment of the Effects of Projects on the Environment.<sup>64</sup> With the regime for the Antarctic, although the idea of EIAs can be found in a number of earlier

58 In particular, the Parties called for the development, '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'. Resolution No. 4. Adverse Effects of Sound, Vessels and Other Forms of Disturbance on Small Cetaceans. 5th MOP (The Netherlands). Annex 14. Preamble.

<sup>57</sup> Conservation Plan. Section 2.

<sup>59</sup> Resolution 2.16. Assessment And Impact Assessment Of Man-Made Noise. 2004 Report of the Second Meeting of the Parties to ACCOBAMS. (UNEP/CMS). 60 See ACCOBAMS (2006). Recommendation SC4.3. Anthropogenic Noise. (Monaco, 5-8 November). 49.

<sup>61</sup> The Plan of Implementation from the WSSD, in calling 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, 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'. Plan of Implementation. Section 36 (c).

<sup>62</sup> The words 'competent international organisations' comes from Article 204 (1). Such information should also be made available to suitably interested States. See Article 205.

<sup>63</sup> 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. Official Journal L 073, 14/03/1997 P. 0005 – 0015.

<sup>64</sup> Council Directive of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment (85/337/EEC).

recommendations,<sup>65</sup> 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.<sup>66</sup> The World Bank made EIAs mandatory for its projects in 1989.<sup>67</sup>

16. 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 United States). Although it is a United Nations Economic Commission for Europe (UNECE) Convention, the Convention was amended, in 2001, to allow states which are not members of the UNECE but which are members of the UN to accede to the Treaty. The Parties to the Espoo have gone on to create a Compliance Committee<sup>68</sup> and a database of transboundary EIAs.<sup>69</sup> It also assists delegates from developing countries, or those in economic transition, to attend their meetings.<sup>70</sup> The

65. See recommendations IV-4, VIII-11, VIII-13, IX-5 and XII-3.

<sup>66</sup> See Article 6(1)(b) and article 8 in particular. According to article 8 of the Madrid Protocol, if proposed activities, which 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, then procedures set out in a dedicated Annex for prior assessment of the impacts of those activities must be followed. The Annex contained a preliminary impact assessment, followed by an initial environmental evaluation (to see if it is minor or not), followed by a comprehensive environmental evaluation, if it is not minor, which will look at, inter alia, the extent of the direct and indirect impacts of the proposed activity and possible mitigation measures. This evaluation shall 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.

<sup>67</sup> 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' 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. See Operational Directive 4.01, information related to this (and other World Bank Directives in this area is provided in the Environmental Assessment Sourcebook (World Bank, Washington. D.C. 1991). 68 The 2nd MOP established an Implementation Committee, for the review of compliance by the Parties with the obligations under the Convention, with a view to assisting them fully to meet their commitments. Decision II/4. Review of Compliance. Printed as Annex IV to Report of the Second MOP to the Convention on EIA in a Transboundary Context, ECE/MP.EIA/4, Aug 7, 2001. This duly reported to the 3rd MOP, and recommendations came from it (largely related to better administration and application of the Espoo by the Parties, such as having clear and competent contact points, notifications and final decisions are done within correct time and procedures etc.) Decision III/1. Review of Implementation. Printed as Annex 1 of Report of the Third MOP to the Convention on EIA in a Transboundary Context, ECE/MP.EIA/6. Sep 13, 2004. The 3rd MOP also repealed II/4 and set up a Committee for the review of compliance to the Convention. The Committee which aims to provide 'constructive solutions' can receive information of alleged non-compliance by Parties to the Convention, or through its own initiative. It can then proceed to gather information, and make reports to the MOP. Decision III/2. Review of Compliance. Printed as Annex II of Report of the Third MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/6. Sep 13, 2004.

<sup>69</sup> The database on EIA was established at the first MOP. See Decision I/5. Establishment of the Database on EIA. Printed as Annex V to Report of the First MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/2. Nov 10. 1998. Continued at the 2nd MOP. See Decision II/6. The Database on EIA. Printed as Annex VI to Report of the Second MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/4. Aug 7, 2001. and expanded to include a networking facility. Re, Decision II/7. The Networking Facility Attached to the Database on EIA. Printed as Annex VII to Report of the Second MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/4. Aug 7, 2001. The database was closed at the 3rd MOP, and the data transferred to the Secretariat (to still be made available, and Parties still urged to submit case studies). Decision III/6. Information Exchange on EIA in a Transboundary Context. Printed as Annex VI of Report of the Third MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/6. Sep 13, 2004.

<sup>70</sup> Decision I/7. Financial Assistance to Countries With Economies in Transition. Printed as Annex VI to Report of the First MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/2. Nov 10. 1998. Decision II/12. Financial Assistance to the Countries with Economies in Transition. Printed as Annex XII to Report of the Second MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/4. Aug 7, 2001. Decision III/11. Financial Assistance to

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 recognized that many environmental projects and their effects, such as noise pollution, originating from one country can have significant transboundary environmental impacts in other regions, and these effects have to be taken into account explicitly.

17. The second international instrument in the area of impact assessment is the Kiev Protocol. This Protocol followed a recommendation by the 2<sup>nd</sup> Meeting of the Parties to the Espoo Convention that EIAs in a transboundary context should also be applied at the strategic level.<sup>72</sup> The meaning of a 'strategic level' is that Parties evaluate the overall environmental consequences of their proposed plans, measures, and instruments which may have significant environmental effects.<sup>73</sup> Although the Kiev Protocol has been signed by 38 countries, to date, only 6 have ratified it, and accordingly, it is not yet in 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.<sup>74</sup> Likewise, the CMS has embraced the need for SEAs.

## III. The Core of Impact Assessment.

18. Both forms of impact assessment aim to predict potential impacts of something which 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 impactful actions before any decisions to proceed are taken.<sup>75</sup> 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.<sup>76</sup>

# IV. The Limits of Impact Assessment.

19. Impact assessments are aids to decision making. They are one of a number of tools that decision makers can utilise. They are not the final word in decision making

Representatives of Countries in Transition, Non-Governmental Organisations and Countries Outside the Region. Printed as Annex XI of Report of the Third MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/6. Sep 13, 2004.

<sup>71</sup> As the Parties to ACCOBAMs recognized, 'some types of anthropogenic noise can travel hundreds and even thousands of kilometers underwater and, more than other forms of pollution, are not restricted by national boundaries'. ACCOBAMS. Resolution 2.16 Supra note 58, Preamble.

<sup>72</sup> Decision II/9. Strategic Environmental Assessment. Printed as Annex IX to Report of the Second MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/4. Aug 7, 2001.

<sup>73</sup> SEA Protocol. Preamble.

<sup>74</sup> See Resolution 9.8. Streamlining the Implementation of the Strategic Plan of the Convention 2003-2008. (Kampala, 2005). Strategy 1.2.

<sup>75</sup> Holder, J. (2005). Environmental Assessment: The Regulation of Decision Making. (Oxford University Press, Oxford). 13. Glasson. Supra note 5, at 3. Espoo. Preamble. International Association for Impact Assessment (2005). Biodiversity in Impact Assessment. (IAIA, Special Publication Series No. 3).

<sup>76</sup> EU 1997. Article 2 (1). Espoo. Article 2 (3). UNEP Goals and Principles of EIA. Supra note 2.

processes, despite the fact that many commentators assume that they are (or should be) the definitive consideration when final decisions are made. 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. Indeed, the only obligation upon the decision makers is that they follow certain procedures and 'examine impartially' the information before them, which they are only obliged to take 'due account' of, or 'duly taken into account', or 'take into consideration'. The best that can be said in these circumstances is that decisions are made with as much quality information before them as possible.

- 20. 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'. <sup>84</sup> For example, within the EU, once a decision is made and the public (and interested other 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. <sup>85</sup>
- 21. Occasionally, there are exceptions to this approach where EIAs have been called for from within a multilateral processes. For example, although the Committee of the WHC will challenge a country if an EIA is slow in coming forward<sup>86</sup> and it may even ask for copies of the EIA, <sup>87</sup> generally, it does not challenge the results of the EIA unless it was flawed in its process or limited in its scope.<sup>88</sup> Accordingly, it is very rare, that the Committee of the WHC request a government to reconsider the merits of their choice, after an EIA was undertaken (although this has very occasionally happened).<sup>89</sup> 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, <sup>90</sup> and national parks of Poland, <sup>91</sup> and the proposed navigable waterway through the Bystroe estuary in the Danube Delta in the

<sup>77</sup> Wood, C. (2000). Environmental Impact Assessment: A Comparative Review. (Prentice Hall, New York). 221-238.

<sup>78</sup> Glasson. Supra note 5, at 13.

<sup>79</sup> UNEP Goals and Principles of EIA. Supra note 2.

<sup>80</sup> Espoo. Article 2 (1) and 6 (1). SEA Protocol. Article 11.

<sup>81</sup> CBD. Article 14 (b).

<sup>82</sup> EU. Article 8.

<sup>83</sup> Espoo. Preamble.

<sup>84</sup> Espoo. Article 6 (2).

<sup>85</sup> EU. Article 9. See also UNEP, supra note 2. Principle 9.

<sup>86</sup> UNESCO. (2003). 27th Session of the WHC. WHC-03/27.COM/24. Dec 10, 2003. 36.

<sup>87</sup> UNESCO. (1999). 23rd Session of the WHC. WHC-99/CONF.209/22. Mar 22, 2000. 62. UNESCO. (2004). 28th Session of the WHC. WHC-04/28.COM/26. Oct

<sup>29.</sup> Decisions 28 COM 15B.1, B.7 & B28. Decision 29 COM 7B.5 (on Banc d'Arguin).

<sup>88</sup> Decision 29 COM 7B.67.Rev

<sup>89</sup> UNESCO. (1997). 21st Session of the WHC. WHC-97/CONF.208/17. Feb 27, 1998. 21.

<sup>90</sup> Recommendation No. 98. (2002). The Project to Build a Motorway Through the Kresna Gorge (Bulgaria). Report of the 22nd Meeting of the Bern Convention. T-PVS (2002) 13. Appendix 10.

<sup>91</sup> Recommendation No. 108 (2003). The Proposed Construction of the Via Baltica (Poland). Report of the 23rd Meeting of the Bern Convention. T-PVS (2003). 24. Appendix 12.

Ukraine.<sup>92</sup> In all such instances, the Parties to the Berne Convention set down very clearly all the steps that an appropriate EIA should contain. In other instances, such as with Greece, they have called for a certain position to be adopted, if the EIA reaches certain conclusions.<sup>93</sup>

# V. Exemptions.

22. 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) place 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. <sup>94</sup> For example, although rarely used, <sup>95</sup> the EU Directives nevertheless allows for, in exceptional cases, exemption of projects from the application of the Directive. Notably, and as also reflected in the SEA Protocol, <sup>96</sup> projects serving national defence purposes are not covered by the Protocol. <sup>97</sup> Both the EU<sup>98</sup> and the SEA Protocol <sup>99</sup> also agreed 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 publicised,

[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. 100

# VI. Significance, Screening, and Appendices.

23. Impact assessment only apply to projects that may have a 'significant' impact. All of the instruments specify this. In such settings, unsurprisingly, the word 'significant' has become the threshold of determining whether impact assessment processes should apply,

<sup>92</sup> Recommendation No. 111. (2004). On the Proposed Navigable Waterway Through the Bystroe Estuary (Danube Delta, Ukraine). Report of the 24th Bern Meeting of the Bern Convention. T-PVS (2004). 16. Appendix 5.

<sup>93</sup> Recommendation No. 38 (1992). The Conservation of the Missolong Wetlands in Greece. Recommendation No. 64. (1997). The Conservation of the Caretta caretta in Kaminia, Greece. Report of the 17th Meeting of the Bern Convention. T-PVS (97) 63. Appendix 17.

<sup>94</sup> See Wood. Supra note 76. 108-124.

<sup>95</sup> See European Commission (2006). Clarification of the Application of Article 2 (3) of the EIA Directive. (Office for Official Publications of the European Communities, 2006).

<sup>96</sup> SEA Protocol. Article 4(5)(a).

<sup>97</sup> Article 1 (4).

<sup>98</sup> Article 2 (3)

<sup>99</sup> SEA Protocol. Article 5 (4).

<sup>100</sup> UNESCO. (2004). 28th Session of the WHC. WHC-04/28.COM/26. Oct 29. Decision 28 COM 15B.11.pp81.

or not. Due to such 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 all instruments require impact assessments to be undertaken for projects which may have a significant impact, few of them clearly explain what the word 'significant' means. <sup>101</sup> Although some approaches of international significance, such as those of the World Bank, look at the project and its potential impacts before deciding the appropriate response, <sup>102</sup> others focus just on the areas that 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 auspice. 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]. <sup>103</sup>

- 24. 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.<sup>104</sup> Thus, much of the discretion in the screening decision of whether a proposal should be subject to scrutiny or not is removed.
- 25. The approach of impact assessments being obligatory because of the type of the proposal is exemplified by the Espoo<sup>105</sup> and the Kiev Protocols. Likewise, and for example, with the EU, the original Annex I had only 9 (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 9 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

<sup>101</sup> Gilpin, A. (1996). Environmental Impact Assessment: Cutting Edge for the 21st Century. (Cambridge University Press, Cambridge). 5-8. Holder. Supra note 74.

<sup>102</sup>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, or sensitive. 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 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

<sup>103</sup> CBD. Decision VII/28. Protected Areas. Annex. Section 1.5.1

<sup>104</sup> See Morgan, R. (2001). Environmental Impact Assessment: A Methodological Approach. (Kluwer, London). 93-113.

<sup>105</sup> Espoo. Article 2 (2)

<sup>106</sup> Such as 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. SEA Protocol. Article 4 (2).

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.

- 26. The second tier of screening for projects which should conduct impact assessment, for most regional or international instruments, is that the Appendix I is not treated as exhaustive. Accordingly, impact assessments may also be suitable for activities not listed in the given Appendix I, if they also have significant impacts. This approach is common with the Espoo<sup>107</sup> and the Kiev Protocol, although with the latter, there is a second Annex which contains a list of a further 90 projects not included in Appendix I, which are indicative that an SEA should be applied. Many of these pertain to projects with clear potential impacts on marine areas. <sup>108</sup> Likewise, with the EU, projects in Appendix II (which was updated and expanded)<sup>109</sup> shall be subject to an EIA, if Member States consider, on a case-by-case approach, that the characteristics of the proposal, crosses certain 'thresholds', and thereby justifies the utilisation of an impact assessment. <sup>110</sup>
- 27. The decision of whether impact assessment should be used for activities not in Appendix I is potentially difficult. Accordingly, a third Appendix is often attached in order to determine whether the second Appendix should apply. With the EU, Appendix III selection criteria are divided into three parts. These are,
  - The characteristics of the project, including, inter alia, in terms of 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, regenerative and absorptive capacity, with a direct focus on key habitats, such as, inter alia, coastal zones and protected areas,
  - Characteristics of the potential impact in terms of its extent, magnitude, duration, likelihood and transfrontier possibilities. 111

28. This approach, which is mirrored in the Kiev Protocol, 112 is slightly different with the Espoo, in that a decision (of whether an EIA should be conducted for a non-Appendix I

108 A large number of those with marine impacts, including, inter alia, extraction of minerals by marine or fluvial dredging, shipyards, construction of harbors and port installations, including fishing harbors, 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.

109 The original Annex II contained 6 types of industries (such as agriculture, extractive, energy, metals, glass, food, textile, leather, wood and paper, rubber,) and their most obvious subsets. Thus, the category of 'infrastructure' included, inter alia, construction of harbors, 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).

<sup>107</sup> Espoo. Article 2 95)

<sup>110</sup> Article 4

<sup>111</sup> Article 4 (4).

<sup>112</sup> 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 impacs, 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'. SEA Protocol. Article 5 and Annex III.

activity) can be forwarded to an independent commission of inquiry for advice. This Commission uses similar criteria as noted above for the EU. 114

## VII. What the Impact Assessment Must Contain.

#### A. Accurate Information.

29. The need for reliable information in the EIA/SEA process cannot be understated. Without that information the exercise can quickly become pointless. 115 Accordingly, most of the instruments in this area carefully spell out exactly what minimum information 116 is required, and how it is to be acquired, such as who is to pay for the provision of this information 117

## B. Clearly Defined Potential Impacts.

30. 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. 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.

#### C. Alternatives.

31. 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

<sup>113</sup> Espoo. Appendix IV

<sup>114</sup> 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 which are particularly complex and possess potentially adverse effects, including those giving rise to serious effects on humans or on valued species or go beyond the carrying capacity of the environment. See Espoo. Appendix III.

<sup>115</sup> See Morgan. Supra note 103. 22-23.

<sup>116</sup> SEA Protocol. Article 7 and Annex IV. EU Articles 3 and 5, and Annex IV. For the Antarctic, see Resolution 1 (2005). Environmental Impact Assessment: Circulation of Information. Final Report of the 28th ATCM. (Stockholm, 2005). 27. Resolution 6. (1995). Environmental Impact Assessment: Circulation of Information. In Antarctic Treaty: Report of the Nineteenth Meeting. (Seoul, 1995). 121-125. For the minimum information for the Ramsar EIAs, see Resolution 7.16. Impact Assessment. (1999, San Jose).

<sup>117</sup> 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 Annex IV. Decision III/4. Guidelines on Good Practice and on Bilateral and Multilateral Agreements Guidance on the Practical Application of the Espoo Convention. Paragraphs 32-34.

<sup>118</sup>Espoo. Appendix II.

<sup>119</sup> Espoo. Article 9.

the decisive factor within an impact assessment. That is, quite clearly, 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, the UNEP Principles stipulate, that an EIA should include, 'at a minimum... a description of the practical alternatives, as appropriate'. This minimum requirement of a clear and comprehensive description of practical alternatives is clear within the Espoo, the Kiev Protocol, the EU instruments, and the Madrid Protocol. 121

- 32. 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. Whilst SEAs tend to look at alternative policy options, <sup>122</sup> EIAs tend to look at alternatives through a much smaller prism which range 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. <sup>123</sup> This is particularly so when dealing with sensitive areas such as key habitats or sites (or animals within them) with protected status. <sup>124</sup>
- 33. With regard to oceanic noise pollution, it is a common suggestion that alternative less oceanic noise polluting technologies should be investigated and developed. This approach has been mirrored by the recommendations of the Parties to the ACCOBAMS (in 2002, and again by the Scientific Committee in 2006). However, the idea of alternative timings of noise emissions, let alone alternative locations for proposed projects, in which the impacts of noise pollution upon the marine ecosystems are removed, has not been advocated beyond some passing suggestions that 'complete noise pollution prohibition zones' may be appropriate in some areas. Any EIAs, in this area, will need to undertake a comprehensive evaluation of all of these alternatives.

# D. Mitigation.

<sup>120</sup> UNEP Goals and Principles of EIA. Supra note 2.

<sup>121</sup> Resolution 4 (2005). Updating the Guidelines for Environmental Impact Assessment in the Antarctic. Final Report of the 28th ATCM. (Stockholm, 2005). 27 Resolution 1. (1999), Guidelines for EIA in Antarctica. In Antarctic Treaty: Report of the Twenty-Third Meeting. (Lima, 1999). 55.

<sup>122</sup> Holder. Supra note 74. 162-164

<sup>123</sup>Espoo. Appendix II (b). Kiev Protocol. Article 7 and Annex IV. EU Article 3 and Annex IV, section 5.

EU Article 3 and Annex IV, section 5.

<sup>124</sup> Holder. Supra note 74. 14-16, 148-162.

<sup>125</sup> European Parliament Resolution on the Environmental Effects of High-Intensity Active Naval Sonars. B6-0089/2004. Paragraph 7. IUCN. Third Conservation Congress (2004, Thailand). RESWCC3.068 Undersea noise pollution. Congress reference: CGR3.RES053.Rev.1. Paragraph 5.

<sup>126</sup> Resolution 2.16. Supra note 58

<sup>127</sup> See ACCOBAMS (2006). Recommendation SC4.3. Anthropogenic Noise. (Monaco, 5-8 November). 49.

<sup>128</sup> IUCN. Third Conservation Congress (2004, Thailand). RESWCC3.068 Undersea noise pollution. Congress reference: CGR3.RES053.Rev.1. Paragraph 5.

34. 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 one of the minimum requirements for meaningful impact assessments. 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. The need to consider this option is clear in all of the major instruments.

35. Basic mitigation measures to be considered with regard to oceanic noise pollution and marine ecosystems are methods to ensure that susceptible organisms are not in the area when the noise is being conducted. Ideally, these measures will overlap with the scientific knowledge of where the susceptible organisms are believed to reside or migrate, and where the areas are deemed more important than others. In such situations, the degree of mitigation measures should be amplified. At a minimum, such mitigation options should include: actions such as the utilization of trained observers (who seek to detect visually and identify marine species which may be the victims of potential impact), additional electronic means (such as underwater listening systems) of monitoring to detect marine mammals, <sup>132</sup> and 'ramping up' measures, whereby the noise levels are slowly increased, with a view to driving away species from an area before the worst emissions of noise may occur. <sup>133</sup>

## VIII. Monitoring.

36. 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, so as to ensure that everything goes as planned. Failure to go to plan may mean that the project has to be halted, or the consent for future projects on the same theme, may have to be revisited.<sup>134</sup> For example, the Kiev Protocol obliges the monitoring of the significant environmental effects of the implemented plans and programmes, in order to, inter alia, identify at an early stage, unforeseen adverse effects and to be able to undertake appropriate remedial action if necessary. Similar obligations exist with the Antarctica regime. With the Espoo, the Convention provides that the Parties shall determine at the request of one of the Parties whether a post-project analysis shall be carried out. In practice both concerned Parties may have different views whether such an analysis is necessary. If there is a difference of opinion on whether post-

 $<sup>129\</sup> UNEP$  Goals and Principles of EIA. Supra note 2.

<sup>130</sup> International Association for Impact Assessment. Supra note 74. At 3.

<sup>131</sup>Espoo. Appendix II (e). EC. Article 3. Annex IV. Section 3. SEA Protocol. Article 7 and Annex IV.

<sup>132</sup> Reuters. (2007). 'Listening Post Ships to Help Save Whales'. New Zealand Herald. April 25. A16.

<sup>133</sup> Note, that further scientific work needs to be done on 'ramping up' measures, as in some instances, the lesser noise may actually attract curious cetaceans to an area.

<sup>134</sup> Sadler, B. and Brown, S. (2005). Principles of Environmental Impact Assessment: Best Practice. (International Association for Impact Assessment, London).

Section 4. Wood. Supra note 76. At 240-257. For the World Bank and the Monitoring of Projects, subject to an Environmental Assessment, See OP/BP 13.05, Project Supervision.

<sup>135</sup> SEA Protocol. Article 12

<sup>136</sup> Recommendation XIV-2. Human Impact on the Antarctic Environment: Environmental Impact Assessment. In Antarctic Treaty: Report of the Fourteenth Meeting (Rio de Janeiro, 1987), 71.

project analysis is required consultations may be required. Any post-project analysis undertaken shall include, in particular, the surveillance of the activity and the determination of any adverse transboundary impact. 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,
- Verification of past predictions in order to transfer experience to future activities of the same type. 138

## IX. Multilateral Cooperation and Notification.

37. 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. However, the trend in this area, as reflected in the Espoo and the Kiev Protocol, that bilaterial, regional or multilateral cooperation may lead to a more appropriate location for the investigation of an EIA to be based, or its findings deliberated. This goal, which has been subsequently reiterated within the Espoo Convention, has a strong focus on the UNECE region (and the associated UNECE conventions) and the Balkan and Black Sea regions in particular. In this regard, the Parties to the Espoo 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.

38. One of the justifications for working within an Espoo context, is that the Espoo sets down clear guidelines on what is known as '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. <sup>147</sup> This idea of active and

138 Espoo. Appendix IV

<sup>137</sup> Espoo. Article 7.

<sup>139</sup> Espoo. Article 4 (1).

<sup>140</sup> 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. SEA Protocol. Article 3 (5).

<sup>141</sup> Espoo. Article 8.

<sup>142</sup> Decision II/1. Bilateral and Multilateral Cooperation. Printed as Annex I to Report of the Second MOP to the Convention on EIA in a Transboundary Context.

<sup>143</sup> Decision II/8. Strengthening Subregional Cooperation. Printed as Annex VIII to Report of the 2nd MOP to the Convention on EIA in a Transboundary Context. ECE/MP EIA/4 Aug 7 2001

<sup>144</sup> See Decision II/5. Recent Developments and Links With Other ECE Conventions. Printed as Annex V to Report of the Second MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/4. Aug 7, 2001. Also, Decision III/3. Strengthening Cooperation With Other UNECE Conventions. Printed as Annex III of Report of the Third MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/6. Sep 13, 2004.

<sup>145</sup> Decision III/5. Strengthening Subregional Cooperation. Printed as Annex V of Report of the Third MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/6. Sep 13, 2004.

<sup>146</sup> Espoo. Appendix VI.

<sup>147</sup> UNEP Goals and Principles of EIA. Supra note 2.

meaningful engagement with other countries that may be impacted upon by the projects originating from another State, is also clear within the EU instruments, the Kiev Protocol 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

- 39. However, it is with the Espoo and its pure focus on transboundary<sup>151</sup> contexts that the importance of impacts beyond State boundaries, and trying to anticipate them, is uppermost. Accordingly, the Espoo has the most detailed obligations of notification<sup>152</sup> for potential transboundary environmental impacts (including problems such as those potentially affecting migrating species)<sup>153</sup> from the Party of origin, to other States possibly affected.<sup>154</sup>
- 40. The importance of this approach to bilateral, regional or multilateral cooperation for the Parties to the ACCOBAMS is that they should not be contemplating the utilisation of EIAs in a vacuum. Rather, they should be considering, as their Conservation Plan suggests, 'co-operat[ion] with relevant international organizations'. In this context, and given the regional emphasis and the membership of the ACCOBAMS, the Parties should be giving direct consideration to working closely with the Espoo Convention, and within their guidance, on the topic at hand. This guidance, which is particularly strong on topics such as notification, is important to discussions such as those related to noise pollution, as the impacts are often transboundary and the active involvement of all Parties who may be impacted upon this by this pollution should be encouraged.

# X. Public Participation.

41. The final point that the Parties to the ACCOBAMS should bear in mind is that impact assessments have a strong association with public participation. The overlap with a strong public participation, including the involvement of NGOs, should be a relatively easy

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. Espoo. Article 1 (viii).

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<sup>148</sup> 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 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 information (on the project, 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 Article 7 (1).

<sup>149</sup> Kiev. SEA. Article 9 150 CBD. Article 14 (c).

<sup>152</sup> See Decision I/4. Format for Notification. Printed as Annex IV to Report of the First Meeting of the Parties to the Convention on Environmental Impact Assessment in a Transboundary Context. ECE/MP.EIA/2. Nov 10. 1998.

<sup>153</sup> Annex IV. Decision III/4, Guidelines on Good Practice and on Bilateral and Multilateral Agreements Guidance on the Practical Application of the Espoo Convention. Paragraphs 26 and 80.

<sup>154</sup> Espoo. Article 2 (4) and 3

<sup>155</sup> Conservation Plan. Section 3.

objective for the ACCOBAMS to achieve, as they already value strong working relationships with civil society. 156

- 42. In the impact assessment context, public participation may be defined as the involvement of individuals and groups, including relevant public authorities<sup>157</sup> 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 for how to achieve meaningful public participation has been given from the Parties to the Espoo,<sup>158</sup> and World Bank<sup>159</sup> and the Kiev Protocol.<sup>160</sup> Best practice in this area suggests that the participation should be as wide as possible.<sup>161</sup> 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 concerned<sup>162</sup> and their potential impacts.<sup>163</sup>
- 43. Within the impact assessment processes, public participation is recognized as enhancing transparency of decision making processes, good governance, the sharing of information, and, ultimately, the legitimacy of the entire process. 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). 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 their EIA Directive, with a view to aligning their public participation provisions within their impact assessment requirements to be in accordance with the Aarhus Convention.
- 44. 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

156 Resolution 2.30. Recognising the Important Role of NGOs in Cetacean Conservation. Report of the 2nd MOP to the ACCOBAMS Agreement (2004, Spain).

158 Decision II/3. Guidance on Public Participation in EIA in a Transboundary Context. Printed as Annex III to Report of the Second MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/4. Aug 7, 2001. Decision III/8. Guidance on Public Participation in EIA in a Transboundary Context. Printed as Annex VIII of Report of the Third Meeting of the Parties to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/6. Sep 13, 2004.

159 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 paragraphs 15, 16, 17 of the Operational Procedures.

160 The SEA 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).

161 Holder. Supra note 74. 22-23. Gilpin. Supra note 100). 63-72. International Association for Impact Assessment. Supra note 74. 162 Article 6 (3).

163 Espoo. Article 2 (6).

164 See Andre, P, et al. (2006). Public Participation: International Best Practice Principles. (Special Publications Series, No 4, International Association for Impact Assessment). Sadler. Supra note 133.

165 Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters. ECE/CEP/43. Also reprinted in 38 International Legal Materials (1999): 517.

relevant disciplines and interested groups should be allowed appropriate opportunity to comment on the EIA'. Likewise, the Parties to the Espoo agreed to, 'the establishment of an EIA procedure that permits public participation and preparation of the EIA documentation'. The Parties to the Espoo take this obligation so seriously that to help facilitate NGO involvement in the EIA processes, they even provide assistance for a number of NGOs to attend their meetings. The Parties to the Kiev Protocol, which place a high value on transparency, have agreed to, 'ensure early, timely and effective opportunities for public participation' including that by relevant NGOs, in the SEA process. The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs, The World Bank also requires EIAs to involve project-affected groups and local NGOs and the NGOs

#### XI. Conclusion.

45. 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. Even some of the subsidiary agreements to the CMS, such as the ACCOBAMS, recognize the utility of impact assessments. These environmental conventions are supplemented by a number of other instruments, ranging from the UNCLOS to the Espoo Convention and its SEA Protocol, and notable EU Directives. Within all of these instruments, whilst EIAs are well established, SEAs have yet to gain the same level of recognition. This is unfortunate as some organizations, such as the ACCOBAMS who are faced with having to deal with a large amount of overlapping policies which all have the potential to generate substantial noise pollution, could benefit from the use of SEAs in addition to EIAs.

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

166 UNEP. Supra note 2. Principle 7.

168 Decision III/11. Financial Assistance to Representatives of Countries in Transition, Non-Governmental Organisations and Countries Outside the Region. Printed as Annex XI of Report of the Third MOP to the Convention on EIA in a Transboundary Context. ECE/MP.EIA/6. Sep 13, 2004.

<sup>167</sup> Espoo. Article 2 (2).

<sup>169</sup> SEA Protocol. Article 1 (c).

<sup>170</sup> Kiev Protocol, Preamble and article 8.

<sup>171</sup> For the Bank's approach to NGOs, see GP 14.70, Involving Nongovernmental Organizations in Bank-Supported Activities

<sup>172</sup> Recommendation 6.2. Environmental Impact Assessment. (1996, Brisbane).

<sup>173</sup> The (Akwe 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. 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: a cultural impact assessment will generally address the impacts, both beneficial and adverse, or a proposed development that may affect, for example, the values, belief systems, customary laws, languages, customs, economy, relationship with the local environment and particular species, social organization and traditions of the affected community. 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. Dec 12, 2003. pp.29.

174 Decision VI/10. Article 8(j) and Related Provisions. UNEP/CBD/COP/6/20.pp 151. Annex II. Also, Report of the Third Meeting Ibid. pp.32.

- applicable for most (if not all) of the ACCOBAMS signatories, due to their existing strong national, regional and international obligations on this question.
- 47. The need for impact assessments is particularly strong when examining projects may contain significant transboundary impacts and/or impact upon the species at the centre of the ACCOBAMS concern. Although this conclusion is independent of the ACCOBAMS existing recognition of the need to utilize EIAs, the increasing regional and international influence in this area, should supplement the ACCOBAMS Parties work in this area.
- 48. Despite this obligation, it is important to realize that there are two limitations to the value of EIAs. 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 which may have significant environmental impacts.
- 49. Within the ACCOBAMS context, when EIAs are undertaken, they should only be based on projects which may have 'significant' impacts. Accordingly, the Parties should define how they interpret 'significant'. Guidance of what is deemed significant, and therefore 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 regimes (including, inter alia, the construction of new ports to coastal reclamation or new major transport routes) will 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 on potential oceanic noise pollution.
- 50. 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); detailed analysis on the topic of alternatives (in terms of technology, location and the 'no project' option). Consideration of mitigation options should consider, inter alia, the possibility for human observers, supplemented by electronic measures, and methods which restrict the timing, intensity or delivery of the noise pollutant. Finally, detailed monitoring requirements, including those which focus on evaluation of the impacts, compliance and success of the mitigation measures should be included.