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ENVIRONMENTAL IMPACT ASSESSMENTS IN AREAS BEYOND NATIONAL JURISDICTION

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Contents

Abstract

A state that wishes to proceed with an activity or development has an obligation to undertake an assessment of the risks that activity will have on the environment. This obligation has been generally accepted in domestic and international law, and is often conducted in domestic and trans boundary areas. However, the application of the obligation in marine areas beyond national jurisdiction has been fragmented, with many activities and areas not being assessed. This paper looks at the international obligation to conduct an EIA in areas beyond national jurisdiction, and discusses the possibility of the development of an implementation agreement that would enhance and specify the requirement to conduct an EIA in areas beyond national jurisdiction.

I Introduction

Environmental Impact Assessments (EIAs) are tools of environmental governance that are used throughout most of the world as a way to evaluate the potential risks to the environment from proposed human actions and development, [1] and are especially important in the developing realm of oceans governance. The point of EIAs is to ensure that decisions that will affect the environment should be made with the comprehensive understanding of the effects of the activities.[2] At the national level, or in trans boundary situations, the state proposing the development (the originating state) has an qualified obligation to conduct an EIA when there are risks that the development will have a significant adverse impact on the environment, in order to provide information to the originating state, and any state that would be affectd.[3] This requirement becomes much more fragmented when looked at in the context of ABNJ. [4] In some specific uses of the marine environment in ABNJ, EIAs are required

1 Neil Craik *The International Law of Environmental Impact Assessment: Process, Substance and Integration* (Cambridge University Press, Cambridge, 2011) at 4.
2 Kees Bastmeijer and Timo Koivurova "Introduction" in Kees Bastmeijer and Timo Koivurova (eds) *Theory and Praactice of Trans boundary Environmental Impact Assessment* (Martinus Nijhoff Publishers, Leiden, 2008) at 4.
3 John H Knox "The Myth and Reality of Trans boundary Environmental Impact Assessment" (2002) 96 AJIL 291.
4 Elizabeth Druel "Environmental impact assessments in areas beyond national jurisdiction: identification of gaps and possible ways forward" (2013) IDDRI Study 1/13 Paris, France.

to be undertaken with regards to activities such as deep sea fisheries (bottom trawling) and the Area,[5] and are also required in specific places, such as Antarctica.[6] It is apparent, however, that the EIA processes and development has not been consistent.

Some of the most important developments with regard to the use and implementation of EIAs in international environmental law is in relation to the assessment of activities conducted by states in areas beyond national jurisdiction (ABNJ). This paper does not seek to provide a comprehensive discussion of the history and development of the EIA, but instead looks to discuss issues relating to the obligation to conduct an EIA for activities proposed by states to be undertaken in ABNJ. One of the main issues (among many), in this area is whether the current obligations under international law to conduct an EIA for a proposed activity are enough; or whether a new international implementation agreement is required.[7]

Part I of this paper will provide a brief description of the purpose, historical development and content of EIAs. Part II of this paper will discuss the principles of international environmental law that have developed alongside EIAs, which provide a broader international environmental law basis to the requirement to undertake an EIA. Part III of this paper will discuss the EIA obligation in two treaties; the United Nations Convention on the Law of the Sea (UNCLOS), and the Convention on Biological Diversity, and will look at how those obligations are implemented in ABNJ. Part IV will discuss the use of EIAs in high seas fisheries, with a focus on the Resolution of the General Assembly of the United Nations calling for EIAs for deep sea fisheries on the high seas, with a discussion of how that obligation has been implemented by the Regional Fisheries Management Organisations. Part V will address further developments in impact assessment, with a brief discussion of Strategic Environmental Assessment and EIA Guidelines. The majority of the paper will be

5 As above.
6 As above.
3 Elizabeth Druel "Environmental impact assessments in areas beyond national jurisdiction: identification of gaps and possible ways forward" (2013) IDDRI Study 1/13 Paris, France, at 5.

focussed on a discussion of firstly, whether a new implementation agreement under UNCLOS is needed, with a discussion of what an implementation agreement would need to include to be effective.

This paper will touch on the use of EIAs in trans boundary situations, but it is noted that the main focus of this paper is the use and implementation of EIAs by states in ABNJ, also known as the global commons.[8] Throughout this essay, the term EIA is used to describe the whole process of the environmental impact assessment, which covers the initial screening to determine whether an environmental impact assessment or partial assessment needs to be undertaken, through to compliance and enforcement requirements of any conditions that may be placed on the development. The term areas beyond national jurisdiction (ABNJ) is used to describe the marine areas that are not subject to the jurisdiction of any state, and are therefore generally considered to be areas beyond the outer continental shelf.

A Purpose of Environmental Impact Assessments

The main purpose of and EIA is to enable informed decision making that will result in better environmental protection.[9] They provide a specific place for an assessment of the impacts a proposed development or action will have on the environment,[10] so that during the planning and consent stages for these developments, accurate information will be provided to the decision makers to support informed, fact-based decisions that take in to account environmental factors along with socio-economic ones.[11] This is not to say that the purpose of EIAs is to stop environmentally harmful development or use, instead, these assessments are supposed to be used to balance the competing interests of the environment, the economy and society,[12]

8Craik, as above n 1, at 5.
9 Bastmeijer and Koivurova, above n 2, at 1.
10 As above, at 1.
11 Alexandre Kiss and Dinah Shleton *Guide to International Environmental Law* (Martinus Nijhoff Publishers, Lieden, 2007) at 113.
12 Christina Voigt *Sustainable Development as a Principle of International Law: Resolving Conflicts between Climate Measures and WTO Law* (Martinus Nijhoff Publishers, Linden, 2009), at 4.

and are also used find ways to mitigate environmentally harmful impacts of development. [13] The Secretary-General of the United Nations stated:[14]

> One of the aims of environmental impact assessments is to inform decision making by identifying the potentially significant environmental effects and risks of development proposals. In the long term, environmental impact assessments promote sustainable development by ensuring that development proposals do not undermine critical resource and ecological functions.

B Development of Environmental Impact Assessments

The United States began the domestic EIA trend with the introduction of its National Environmental Policy Act of 1969,[15] and thus began a system of the evaluation of proposed actions on the environment that has been adopted by over 130 countries,[16] and has slowly become a part of international environmental law, in a way that is used to support sustainable development.[17] While domestic laws requiring EIAs at the national level have mainly been instituted by developed nations,[18] many developing nations have also adopted the use of EIAs, often encouraged by the use of EIAs by international aid agencies and institutions, [19] such as the World Bank:[20]

> The EIA procedure has also become a familiar tool in the field of project financing by international lending institutions. Since 1991, the World Bank has adopted operational directives requiring EIA before it will approve a project.

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13 Craik, above n 14.
14 Oceans and the Law of the Sea : Report of the Secretary General UN Doc A/66/70 (2011) at [127].
15 Charles M Kersten "Rethinking Trans boundary Environmental Impact Assessment" (2009) 34 Yale J Intl L 173, at 175.
16 As above, at 176.
17 Craik, as above n 1, at 81.
18 Carolyn Abbot "Environmental Command Regulation" in Benjamin J Richardson and Stepan Wood *Environmental Law for Sustainability* (Hart Publishing, Oxford, 2006) at 74.
19 As above.
20 Francesco Francioni "Dispute Avoidance in International Environmental Law" in Alexandre Kiss, Dinah Shelton and Kanami Ishibashi (eds) *Economic Globalisation and Compliance with International Environmental Agreements* (Kluwer Law Internation, The Hague, 2003), at 236.

This EIA process has so far been well received internationally,[21] and through the 1970s and 1980s the requirement to conduct an EIA was adopted by many international treaties and declarations. [22] The development of EIAs within both the international and domestic realms has closely followed the development of principles of environmental protection and conservation, with EIAs being developed as a way to respond to the recognition that policy and decision makers were marginalising environmental considerations.[23] In relation to the use of EIAs to assess activities in the marine environment in ABNJ, this has been developed in line with concerns around the conservation and sustainable development of marine biological diversity in ABNJ "for more than a decade",[24] through multiple international institutions.[25]

The EIA procedure has also been adopted into many international agreements,[26] some of which will be discussed below.

C Content of Environmental Impact Assessments

Generally, the EIA procedure requires firstly an assessment of the current state of the environment as a way to establish baselines,[27] which establish the current state of the health of the environment, from which the impact of the proposed action can be assessed. Depending upon the particular system which can cause variation, EIAs generally follow the process of:[28]

> (a) Screening to determine which projects or developments require a full or partial assessment; (b) scoping to identify which potential impacts are relevant to assess, and alternative solutions that avoid, mitigate or compensate adverse impacts; (c) assessment and evaluation of impacts and development of alternatives; (d) reporting, which takes the form of an environmental impact statement or report, including an environmental management plan; (e) review of the

21 Craik as above n ,1at 175.
22 Kiss and Shelton, as above n 11, at 112.
23 Craik, as above n 1, at 11.
24 Druel, as above, n 7 at 5.
25 As above.
26 Knox, as above n 3, at 291.
27 Craik, as above n , at 138.
28 Report of the Secretary General, as above n 14, at 128.

> environmental impact assessments; (f) decision making on whether to approve the project or not, and under what conditions; (g) monitoring to assess whether the predicted impacts and proposed mitigation measures occur as defined in the environmental management plan; and (h) compliance and enforcement as well as environmental auditing.

EIAs are, at the domestic and international level, a procedural requirement.[29] An EIA provided to decision makers mainly contains information on the proposed development, a conclusion as to the likely environmental effects of the development and a proposal of measures that could be used to mitigate any harmful effects.[30] A legal requirement to conduct an EIA in a territory does not, however, mean that the development will not go ahead if it is found to be environmentally harmful.[31] Often public authorities are the ones who decide, and they retain to them the discretion to determine whether a development will continue.[32] Public authorities are generally also the ones that determine whether the proposed development will have to conform to specific mitigation measures, or even continuous monitoring of the development's environmental impact.[33]

II Principles of EIAs in international Law

Craik argues that because EIA commitments internationally have not developed "in a vacuum, but will reflect the general principles of international environmental law."[34] He argues that the process of the EIA reflects the international principles of "non-discrimination, the harm principle and sustainable development."[35]

A Sustainable Development

The EIA process is very tightly linked with the principle of sustainable development, as one of the purposes of EIAs is to further enhance the ability for a state to develop socially and economically in

29 Abbot, as above n 18, at 75.
30 As above, at 74.
31 As above.
32 As above.
33 As above.
34 Craik, as above, n 1, at 54.
35 As above.

an environmentally sustainable way; "at the centre of each is the idea that environmental considerations and must animate and inform public policy."[36] For the purposes of this paper, the author does not intend to provide a complete analysis of sustainable development, but will focus on the main principle that makes up part of the overarching principle of sustainable development, the precautionary principle.[37]

Sustainable development has been the focus of many international instruments, and is mentioned 12 times in the Rio Declaration (without ever providing a definition),[38] although the United Nations World Commission on Environment and Development provided a definition in the preamble to the report:[39]

> Believing that sustainable development, which implies meeting the needs of the present without compromising the ability of future generations to meet their own needs, should become a central guiding principle of the United Nations, Governments and private institutions, organizations and enterprises.

Sustainable development seeks to reconcile and integrate the objectives of economic development, social justice and environmental protection.[40] One of the most important principles contained within sustainable development is the precautionary principle.[41]

B The Precautionary Principle

Due to the complex nature of ecological systems there is a lack of scientific understanding of how activities impact upon them.[42] The precautionary principle is used to address this lack of scientific understanding when decisions about developments and activities are made.[43] The principle requires that "where there is risk of serious or irreversible environmental harm, anticipatory measures have to be

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36 As above, at 77.
37 As above, at 78.
38 United Nations Conference on Environment and Development, Rio Declaration, June 14 1992, UN Doc A/Conf.151/5/Rev.1 31 ILM 874 (1992).
39 Report of the World Commission on Environment and Development, 11 December 1987, UNGA Doc A/Res/42/187.
39 Christina Voigt *Sustainable Development as a Principle of International Law: Resolving Conflicts between Climate Measures and WTO Law* (Martinus Nijhoff Publishers, Linden, 2009), at 4.
41 Voigt, as above, at 47.
42 Voigt, as above n 12, at 47.
43 As above.

taken to prevent this harm as a response to scientific uncertainty."[44] The principle assumes that ecological systems are not resilient, unless it can be scientifically proven to the opposite,[45] and works to minimise the risks of an adverse impact from human activity.[46]

Therefore; the principle requires that the lack of scientific information on how a development will harm the environment should not preclude actions being taken to prevent or reduce any harm that may be done.

C The non-discrimination principle

The principle of non-discrimination requires that states apply their domestic environmental standards and laws equally across both the environment under the states' jurisdiction, and in areas outside of that jurisdiction,[47] whether that is in a trans boundary context, or in ABNJ. The principle of non-discrimination is related to the equal access principle;[48] which requires that all persons who will be affected by the impact on the environment by the proposed development have the same access to information, [49] and also have the same ability to participate in the decision making process, [50] whether or not that person resides within the originating state.[51] This does mean that if the state proposing the development has weak standards of environmental protection, then those standards will apply;[52] meaning that "[N]on-discrimination is only as effective as the domestic laws of each participating state."[53] In relation to the requirement to conduct an EIA, if the state proposing the development does not, domestically, require that an EIA be conducted, perhaps because the state determines that the threshold that triggers the requirement to conduct an EIA is not met, then there will be no obligation on the state to conduct an EIA in the trans boundary context, or in ABNJ.[54] This,

44 As above.
45 As above, at 48.
46 As above.
47 Craik, as above n 1 at 55.
48 As above.
49 As above.
50 As above.
51 As above.
52 As above, at 56.
53 As above, at 57.
54 As above.

however, may not always be the case; there are certain environments which have such unique character and significance (such as Antarctica), that an EIA assessment is required for activities that will have only a 'minor or transitory' impact upon the environment.[55] The Antarctica situation is, however, covered by an international agreement,[56] with a special Protocol that deals explicitly with EIAs in this specific ANBJ.[57]

C The Harm Principle

The harm principle is a principle of international environmental law,[58] and is an obligation on states to prevent harm being caused to the environment outside of their jurisdiction.[59] The principle has been well developed,[60] and is Principle 2 of the Rio Declaration.[61] The "authoritative formulation" of the principle is found in Principle 21 of the Stockholm Declaration:[62]

> States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, of areas beyond the limits of national jurisdiction and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.

There are two competing interest here: the requirement to prevent harm and the states' sovereign right to develop and exploit their own natural resources. The opposing right and obligation are balanced within the principle,[63] meaning that a state does not have the right to exploit its natural resources no matter the damage to the environment

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55 As above.
56 The Antarctic Treaty 402 UNTS 71 (opened for signature 1 December 1959, entered into force 23 June 1961).
57 Protocol on Environmental Protection to the Antarctic Treaty 30 ILM 1455 (opened for signature 4 October 1991, entered into force 14 January 1998).
58 Craik, as above n 1, at 59.
59 As above, at 60.
60 As above, at 59.
61 Rio Declaration, as above, n 38.
62 United Nations Conference on the Human Environment, Stockholm Declaration, June 16 1972, UN Doc A/Conf.48/14 11 ILM 1416 (1972). It is noted that the Stockholm and Rio Declarations are almost word for word the same, except the Rio Declaration includes "and developmental" between "environmental" and "policies".
6363 Craik, as above n 1, at 59.

outside of its national boundaries;[64] it also means that a state cannot insist that another state refrain from activities that will damage the environment either in the trans boundary context or in ABNJ.[65]

Although both formulations of the principle in the Stockholm Declaration and the Rio Declaration seem to find that states have an obligation to prevent all harm to the environment outside of their jurisdiction, the obligation is not absolute,[66] but is qualified by two further elements; firstly the obligation is only triggered when the harm likely to occur will be "significant". This qualification has mainly developed from the international arbitration covering trans boundary environmental harm, [67] beginning with the *Trail Smelter* arbitration.[68] The 'significant harm' standard, is ambiguous, and has been described variously as "serious", "real" and "something that is more than detectable".[69]

The second qualification to the harm principle is that "the obligation to prevent harm is understood to impose an obligation of conduct, not result."[70] This means that the state proposing to undertake the activity has the obligation to conduct an EIA but does not have an equivalent requirement to prevent all harm stemming from the activity from occurring.[71]

D The Duty to Cooperate

The duty to cooperate is an obligation that contains two parts; the duty to consult and the duty to notify.[72] This is also a procedural obligation, which has developed from the international laws surrounding the use and development of shared resources between states, such as international watercourses.[73] This principle is based on the recognition of a state's sovereignty to develop and exploit its own natural

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57 Craik, as above n 1, at 60.
58 As above.
59 As above.
67 As above, at 61.
68 As above, at 61. See also *Trail Smelter Case (United States v Canada)(Arbitral Decision)* (1941) 3 AJIL 684.
69 Craik, as above n 1, at 61.
61 As above, at 62.
71 As above, at 63.
72 As above, at 68.
63 As above.

resources, with an understanding that if a state plans to undertake activities that will not only affect a common resource, but may also affect the environment of the neighbouring state, then the state undertaking the activity is required to firstly, notify the affected state, and to secondly consult with that state:[74]

> The right that a state possesses to proceed with a project without the prior consent of another affected state is a result of the sovereign right of a state to pursue activities in its own self interest. When faced with the possibility of an affected state raising objections to a planned activity involving a shared resource, the state of origin is under a clear obligation to take those objections into account and, significantly, it must do so in a good faith effort to resolve those objections.

It is noted that while the duty to consult is a good faith obligation,[75] this does not preclude the state proposing the activity from undertaking the activity despite the objections of the affected state; as long as the requirements of duty to cooperate have been met.

The EIA fits within the duty to notify or inform;[76] the originating state needs to provide:[77]

> [s]ufficient information about the project and its effects so as to enable the potentially impacted state to a reasoned assessment of the potential impacts on its interests and so as to enable the impacted state to engage in a consultation process to safeguard those interests. In addition, good faith requires that both states conduct consultations in a genuine, as opposed to a formal or perfunctory, manner.

The principle has also been adopted in to international agreements; the principle is found in Principle 24 of the Stockholm Declaration:[78]

> International matters concerning the protection and improvement of the environment should be handled in a cooperative spirit by all countries, big and small, on an equal footing. Cooperation through multilateral or bilateral arrangements or other appropriate means is

64 As above, at 69.
65 As above.
66 As above, at 71.
67 As above, at 70
78 Stockholm Declaration, as above, n 62, at 24.

> essential to effectively control, prevent, reduce and eliminate adverse environmental effects resulting from activities conducted in all spheres, in such a way that due account is taken of the sovereignty and interests of all States

And also in principle 7 of the Rio Declaration:[79]

> States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit to sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command.

This duty to cooperate becomes harder to institute, however, when applied in ABNJ, where there is no easily identifiable impacted state; if there is no state, person or institution that will be affected by an activity carried out where there are no people, then who does the state notify and consult with?

This principle forms an important part in ensuring that there is public participation in decisions made about proposed developments.[80] In the domestic arena, this allows the public to provide their input and to discuss their personal concerns with those making the decision.[81] In the trans boundary context, this requires that the originating state consult with the impacted state, and the impacted state then provides information on the activity to its own citizens.[82] Kersten argues however, that although the information on the development is provided, in the international and trans boundary context due to the lack of political accountability (as opposed to the accountability inherent to the domestic system).[83]

79 Rio Declaration, as above n 38, at 7.
80 Kersten, as above n 15, at 183.
81 As above.
82 As above, at 186.
83 As above, at 187.

III The International Treaty Environmental Impact Assessment Regime

A United Nations Convention on the Law of the Sea

UNCLOS provides that in ABNJ, the legal regime is based upon the principle of the 'freedom of the seas'.[84] This does not, however, mean that there are no restrictions on those using the high seas; there are many obligations placed on states and those under their jurisdiction by international treaties and institutions. However, this regime is far from comprehensive or cohesive; there are many governance and regulatory gaps,[85] one of which is the lack of a substantive obligation to undertake EIAs in areas beyond national jurisdiction.

UNCLOS has various general obligations to protect and preserve the marine environment, and there is also an obligation on states to assess the impacts of their activities, which has so far generally been accepted as requiring states to conduct EIAs.[86] Under Article 204, states have the obligation to "observe, measure and analyse, by recognised scientific methods, the risks or effects of pollution of the marine environment."[87] The state also has an obligation to continually monitor the effects of activities over which it has jurisdiction to determine whether those activities are likely to result in marine pollution. This obligation continues through Article 206, where if the state has "reasonable grounds" to believe that any proposed activities which will fall under its jurisdiction or control "may cause substantial pollution of or significant and harmful changes to the marine environment", that state shall "as far as practicable, assess the potential effects".[88] This requirement is built on in Article 205 with an obligation for the states to either publish the assessments conducted under Article 204, or to provide the assessments to "competent

68 Robin M Warner and Rosemary Rayfuse "Securing a sustainable future for the oceans beyond national jurisdiction: the legal basis for an integrated, cross-sectoral regime for high seas governance for the 21st century" (2008) 23(3) IJMCL 399.
85 As above.
86 Craik, as above n 1, at 4. See also United Nations Convention on the Law of the Sea (UNCLOS) 1833 UNTS 397 (opened for signature December 10 1982, entered into force 16 November 1994), art 206.
87 UNCLOS, as above, art 204.
88 As above, art 206.

international organisations, which shall make them available to all states."[89]

Because this EIA requirement is based upon jurisdiction of the originating state over its citizens; which is often flag state jurisdiction, the obligation can be applied to ABNJ through the mechanism of flag state control. This does, however, raise the same issues with flag state control, enforcement and flags of convenience that are common in issues of IUU fishing.[90]

While these three articles demonstrate that the international community considered EIAs to be an important part of oceans governance when UNCLOS was being negotiated, [91] they do not provide a substantive obligation, nor do the obligations require specifically an EIA, but rather an 'assessment', [92] and only for particular activities.[93] This is one of the qualifications within Article 206 that allows states to determine, based upon their own technical capabilities and their domestic legislation,[94] whether to conduct a full EIA or a more simple assessment. The requirement to assess if further qualified by the words "as far as practicable".[95] These are important qualifications that allow least developed and developing countries the ability to assess impacts of their activities at their own level,[96] but later qualification does not, itself, remove the states obligation to assess as the assessment is triggered by the threshold of 'serious pollution' or 'significant harm'.[97]

There are, multiple interpretation issues that, due to the lack of definitions, do in the author's opinion, result in less assessment (either EIA or otherwise) than there should be. Firstly, the originating state has the discretion to determine whether it has reasonable grounds to believe that the activities under the originating state's control may cause 'substantial pollution' or 'significant harm'. And secondly, the

89 As above, art 205.
90 As above, n 84, at 401.
91 Craik, as above n 1, at 98.
92 As above, at 99.
93 As above.
94 As above.
95 UNCLOS, as above n 86, art 206.
96 Craik, as above n 1 at 99.
97 As above.

originating state also has the discretion to determine what the threshold for 'substantial pollution' or 'significant and harmful changes' actually means.

Craik notes that the 'reasonableness' qualification is an objective standard, but that the originating state "will likely be given some leeway in determining whether reasonable grounds exist" [98], and further goes on to note that this leeway is "no different from the deference normally granted to a domestic agency in its determination of whether significant impacts are "likely" to occur."[99]

The final interpretation problem revolves around determining when the threshold of 'serious pollution' and 'significant harm' is met, which would then trigger the obligation to assess. This will depend entirely upon the discretion and subsequent determination of the originating state, which is a problem that faces EIA obligations everywhere.[100] It is extremely interesting to note that in the *MOX Plant Case*, although both parties disagreed on whether Article 206 was applicable in the circumstances, both the parties involved accepted that Article 206 does provide an obligation to conduct an EIA,[101] instead, the issue between the parties, however, was what that obligation specifically required of the United Kingdom, in terms of the content of the EIA.[102]

With regard to Article 205 of UNCLOS; this obligation has not resulted in information either being published or provided to international bodies to be disseminated. In the report of the Secretary-General of the UN General Assembly on Oceans and the Law of the Sea said with regards to EIAs in ABNJ by the European Union that "information concerning assessments undertaken with respect to planned activities in areas beyond national jurisdiction, including

98As above, at 98
99As above, at 99.
100Kees Bastmeijer and Ricardo Roura "Environmental Impact Assessment in Antarctica" in Kees Bastmeijer and Timo Koivurova (eds) *Theory and Praactice of Trans boundary Environmental Impact Assessment* (Martinus Nijhoff Publishers, Leiden, 2008) at 218.
101 Craik, as above n 1, at 117.
102 As above. See also *The MOX Plant Case (Ireland v United Kingdom) (Provisional Measures)* (2001) ITLOS case No 10 ICGJ 343.

capacity-building aspects, was still disperse and scarce."[103] The report continued "in the case of those who may have carried out some activities in those areas [ABNJ] there was no information on any environmental impact assessment undertaken" unless the EIAs were "compulsory", [104] highlighting the regulatory gaps in the EIA requirement.

B Convention on Biological Diversity

The Convention on Biological Diversity (CBD) calls for assessments to be conducted, but this Convention calls specifically for EIAs. Article 14 provides:[105]

> 1. Each Contracting Party, as far as possible and as appropriate, shall:(a) Introduce 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 and, where appropriate, allow for public participation in such procedures;
>
> (b) Introduce appropriate arrangements to ensure that the environmental consequences of its programmes and policies that are likely to have significant adverse impacts on biological diversity are duly taken into account;
>
> (c) Promote, 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 (…..)

As with UNCLOS, this obligation is not unqualified,[106] leaving the state that has control over the proposed activity to determine what constitutes firstly an appropriate procedure and, as with Article 206 of UNCLOS, what the threshold of a 'significant adverse effect' is. This obligation seems to be mainly focused on ensuring the EIAs

103 Report of the Secretary General, as above n 14, at 38.
104 As above.
105 Convention on Biological Diversity (CBD) 1760 UNTS 79 (opened for signature 5 June 1992, entered into force 29 December 1993), art 14.
106 Craik, as above n 1, at 99.

conducted domestically include factors that assess impacts on biological diversity.[107] This obligation, however, is explicitly extended to ABNJ through the application of Article 4; where the state party to the convention is bound by the CBD obligations both within national jurisdiction, and also in ABNJ (if the activities are undertaken within the states jurisdiction or control).[108]

The CDB has further developed its EIA requirements, mainly through the development of the Guidelines for Incorporating Biodiversity-Related Issues into Environmental Impact Assessment Legislation and/or Processes and in Strategic Environmental Assessment. [109] These voluntary guidelines were endorsed in 2006,[110] are focussed on ensuring that biodiversity factors are included in the EIAs, and incorporate principles of sustainable development.[111]

This was expanded upon with the convening of the Expert Workshop on Scientific and Technical Aspects relevant to Environmental Impact Assessment in Marine Areas beyond National Jurisdiction in 2009.[112] There were two main issues that were discussed by the expert workshop, which covered firstly the scientific elements that should be included and considered in the further development of the technical guidelines on EIAs in ABNJ, and the gaps that needed to be filled in the 2006 guidelines.[113] These guidelines cover:[114]

> [s]creening, scoping, assessment and evaluation of impacts and development of alternatives (a step which encompasses the examination of alternative [sic] to the project, impact analysis, mitigation and impact management and the evaluation of significance steps defined by the IAIA), reporting of the EIS or EIA

107 As above, at 100.
108 CBD as above n 105, art 4(b).
109 Guidelines for Incorporating Biodiversity-Related Issues into Environmental Impact Assessment Legislation and/or Processes and in Strategic Environmental Assessment, Report of the Sixth Meeting of the Conference of the Parties to the Convention on Biological Diversity, UN Doc UNEP/CBD/COP/6/7.
110 Druel, as above n 7 at 16.
111 Craik, as above n 1, at 108.
112 *Report of the Expert Workshop on Scientific and Technical Aspects Relevant to Environmental Impact Assessment in Marine Areas Beyond National Jurisdiction* [2010] UNEP/CBD/SBSTTA/14/INF/5.
113As above, see also Druel, as above n 7 at 16.
114 Druel, as above n 7, at 17.

report, review of the EIS, decision making and monitoring, compliance, enforcement and environmental auditing.

All the members of the group consider EIAs to be an essential tool for environmental protection, and as such they should be required for all activities to be conducted in the high seas. [115] However, no consensus has been reached as to what an obligation to conduct EIAs would look like or should contain, nor can they agree on how such an obligation can be implemented.[116]

IV Fisheries

The main use of the global oceans would undoubtedly be the fishing activities, conducted by almost all states, and accounts for one of the main sources of environmental degradation of the oceans.[117] Article 87 of UNCLOS guarantees the "freedom of the high seas",[118] which confirms the right of all states to fish on the high seas. This does not mean, however, that all fishing activities on the high seas are allowed;[119] UNCLOS provides that all activities on the high seas must comply with the rules of UNCLOS and international law, such as the obligation to protect and preserve the marine environment,[120] and state parties are also under the obligation to cooperate either directly or through international organisations, [121] in developing standards, guidelines and rules that address the protection and preservation of the marine environment.[122] This has been done in the fisheries context through the United Nations Fish Stocks Agreement, and the development of Regional Fisheries Management Organisations.[123]

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115 Report of the Expert Workshop, as above n 112.
116 Report of the Expert Workshop, as above n 112.
117 A D Rogers and M Gianni *The Implementation of UNGA Resolutions 61/105 and 64/72 in the Management of Deep-Sea Fisheries on the High Seas*, report prepared for the Deep-Sea Conservation Coalition (International Programme on the State of the Ocean, London, 2010), at 10.
118UNCLOS, as above n 86, art 87.
119 As above, see also Gwénaëlle Le Gurun "Environmental Impact Assessment and the International Seabed Authority" in Kees Bastmeijer and Timo Koivurova (eds) *Theory and Praactice of Trans boundary Environmental Impact Assessment* (Martinus Nijhoff Publishers, Leiden, 2008) at 258.
120 UNCLOS, as above n 86, art 192.
121 Le Gurun, as above n 119, at 258.
122 As above.
123 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the

A The United Nations Fish Stocks Agreement and Regional Fisheries Management Organisations

The Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA),[124] provides the principles around which fish stocks are to be managed.[125] UNFSA discussed EIAs at various points in the agreement, and provides at Article 5(d):[126]

> [a]ssess the impacts of fishing, other human activities and environmental factors on target stocks and species belonging to the same ecosystem or associated with or dependent upon the target stocks;

The UNFSA goes on at 6(6):[127]

> For new or exploratory fisheries, States shall adopt as soon as possible cautious conservation and management measures, including, inter alia, catch limits and effort limits. Such measures shall remain in force until there are sufficient data to allow assessment of the impact of the fisheries on the long-term sustainability of the stocks, whereupon conservation and management measures based on that assessment shall be implemented. The latter measures shall, if appropriate, allow for the gradual development of the fisheries.

Article 6(6) differs from the other EIA obligations in that it calls for an assessment of the impacts of fisheries activities after fishing has already begun. The UNFSA also calls for continued scientific assessment of fish stocks,[128] and also calls for the promotion and

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Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks (UNFSA) 2167 UNTS 3 (opened for signature 4 August 1995, entered into force 11 December 2001).
124 As above.
125Oceans and the Law of the Sea United Nations; <http://www.un.org/depts/los/convention_agreements/convention_overview_fish_stocks.htm>
126 UNFSA, as above, n 123, art 5(d).
127 As above, art 6(6).
128UNFSA, as above, n 123.

conducting of scientific assessment by regional and sub-regional fisheries management organisations.[129]

While this Agreement relates specifically to highly migratory and straddling fish stocks, the use of EIAs has been developed in relation to deep sea fisheries, with a particular emphasis on the assessment of the impacts of bottom trawling.[130] The UN GA adopted the Sustainable fisheries and including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments resolution in 2006 calling for the implementation of EIAs with respect to these bottom trawling activities, where the GA:[131]

> Calls upon States, the Food and Agriculture Organization of the United Nations and other specialized agencies of the United Nations, subregional and regional fisheries management organizations and arrangements, where appropriate, and other appropriate intergovernmental bodies, to cooperate in achieving sustainable aquaculture, including through information exchange, developing equivalent standards on such issues as aquatic animal health and human health and safety concerns, assessing the potential positive and negative impacts of aquaculture, including socio-economics, on the marine and coastal environment, including biodiversity, and adopting relevant methods and techniques to minimize and mitigate adverse effects

The Resolution continued to call for states:[132]

> To assess, on the basis of the best available scientific information, whether individual bottom fishing activities would have significant adverse impacts on vulnerable marine ecosystems, and to ensure that if it is assessed that these activities would have significant adverse

129 As above, at 10(g).
130 Druel, as above, n 4, at 23.
131 Sustainable fisheries and including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks, and related instruments UN GA Res 8 December 2006, A/Res/61/105 at 79.
132 As above, at 83(a).

> impacts, they are managed to prevent such impacts, or not authorized to proceed

The Resolution also included a requirement that Flag States adopt and implement, the measures contained within the resolution, specifically including the requirement to conduct and EIA:[133]

> or cease to authorize fishing vessels flying their flag to conduct bottom fisheries in areas beyond national jurisdiction where there is no regional fisheries management organization or arrangement with the competence to regulate such fisheries […...].

This Resolution was a big change in the fisheries area; as no EIAs have really been required for fisheries in ANBJ before this.[134] It is important to note, however, that even though the General Assembly has called for these impact assessments to be undertaken in order to preserve vulnerable marine environments (VMEs), this requirement has not been implemented in a coherent manner:[135]

> The degree to which nations conducted impact assessments varied widely. Despite the call from the UNGA for impact assessments for all bottom fisheries in the high seas, some RFMOs have had no Contracting Parties conduct impact assessments (e.g. NEAFC, NAFO), while in other areas all Contracting Parties have submitted impact assessments (e.g. CCAMLR, NPFC), or some Contracting Parties have conducted impact assessments (e.g. SPRFMO).The impact assessments undertaken also varied in their scope. In some cases, Contracting Parties conducted full risk assessments that included details of fishing history, intended fishing operations, gear to be used, a full definition of VMEs likely to be encountered, and a full ecological risk assessment in consultation with scientists, managers and industry to assess the potential impacts of the proposed fishing operations. Other impact assessments lacked sufficient information to assess the impacts of proposed fishing operations or were based on incorrect assumptions about the presence or lack of presence of VMEs. In addition, several RFMOs have not required impact assessments for exploratory fisheries in

133 UN GA Res A/Res/61/105 at 86.
134 Druel, as above n 4, at 21.
135 Rogers and Gianni, as above n 117, at 3.

new areas and/ or existing fishing areas, despite the UNGA resolutions and FA O Guidelines (FA O, 2009a) that call for all deep-sea bottom fisheries to be assessed.

V Deep Seabed Mining

A The Authority and the Area

One of the main regimes covering ABNJ is found within UNCLOS and regulates the Area;[136] which covers the seabed, subsoil and ocean floor beyond the limits of national jurisdiction.[137] The Area and the mineral resources contained within it have been designated as the common heritage of mankind,[138] and are under the jurisdiction of the International Seabed Authority (the Authority); an international institution created by UNCLOS to control and organise activities (especially resource extraction related activities), [139] within the Area. [140] The development of the ability to mine the seabed for minerals is one particular activity that has the potential to significantly harm the marine environment of the sea bed.[141]

The Authority has a mandate to ensure that the marine environment is protected from resource extraction activities in the Area that may have a harmful impact,[142] and as a result has developed an environmental protection regime that seeks to balance deep seabed mineral extraction with preventing harm to the marine environment.[143] One of the main challenges that has faced the Authority is the lack of scientific understanding of the deep sea bed, which is even less well understood than the surface of the Moon.[144]

136 UNCLOS, as above n 86, Part XI.
137 As above, art 1.
138 As above, art 136. See also Le Gurun, as above n 119, at 222.
139 As above.
140 As above.
141 Druel, as above n 7 at 26.
142 Le Gurun, as bove, n 119, at 222.
143 Decision of the Assembly of the International Seabed Authority regarding the amendments to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area (25 July 2013), ISBA/19/A/9 at 20(b), see also Le Gurun, as above, n 119, at 223.
144 Le Gurun, as above n 119 at 224.

Where a state, or state sponsored actor, proposes exploration or exploitation activities in the Area, they have to conduct EIAs.[145] Here, the obligation is an explicit one,[146] set out in the Annex of the 1994 Agreement to the Implementation of Part XI of UNCLOS, which states that:

> an application for approval of a plan of work shall be accompanied by an assessment of the potential environmental impacts of the proposed activities and by a description of a programme for oceanographic and baseline studies in accordance with the rules, regulations and procedures adopted by the Authority.

EIAs in the Area are well regulated, where the Legal and Technical Commission of the International Seabed Authority has the authority to prepare assessments of the environmental impacts or implications of activities in the Area, [147] and it also has the ability to make recommendations to the ISA Council on whether to stop exploration and exploitation activities "in cases where substantial evidence indicates the risk of serious harm to the marine environment."[148]

The EIA process has been developed in the mining codes of the International Seabed Authority, such as the Regulations on Prospecting and Exploration for Cobalt-Rich Ferromanganese Crusts in the Area, [149] and then further refined over the years in the subsequent regulations that have been implemented, such as the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area,[150] which require that the EIAs cover:

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145 UNCLOS, as above n 86at Part XI, see also Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area (Advisory Opinion) [2011] ITLOS SDC No 17, at [122].
146 Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area (Advisory Opinion) [2011] ITLOS SDC No 17, at [142].
147 UNCLOS, as above n 86, art 165(2)(d)
148 As above, art 165(2)(1)
149 Decision of the Assembly of the International Seabed Authority relating to the Regulations on Prospecting and
Exploration for Cobalt-rich Ferromanganese Crusts in the Area (22 October 2012) ISBA/18/A/11.
150 Decision of the Assembly of the International Seabed Authority regarding the amendments to the Regulations on Prospecting and Exploration for Polymetallic Nodules in the Area (25 July 2013), ISBA/19/A/9 at 20(b).

> (b) A description of the programme for oceanographic and environmental baseline studies in accordance with these Regulations and any environmental rules, regulations and procedures established by the Authority that would enable an assessment of the potential environmental impact, including, but not restricted to, the impact on biodiversity, of the proposed exploration activities, taking into account any recommendations issued by the Legal and Technical Commission;
>
> (c) A preliminary assessment of the possible impact of the proposed exploration activities on the marine environment;
>
> (d) A description of proposed measures for the prevention, reduction and control of pollution and other hazards, as well as possible impacts, to the marine environment;
>
> (e) Data necessary for the Council to make the determination it is required to make in accordance with regulation 13(1)

B The Advisory Opinion on the Responsibilities and Obligations of States Sponsoring Persons and Entities with respect to activities in the Area

EIAs have been strongly endorsed is through the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea, in its 2011 Advisory Opinion on the Responsibilities and Obligations of States Sponsoring Persons and Entities with respect to activities in the Area.[151] The Tribunal stressed that that states have a direct obligation under UNCLOS and a general obligation under customary international law to conduct an EIA.

While this opinion deals mainly with issues of deep seabed mining in the Area, the Tribunal applied the reasoning of the ICJ from *Pulp Mills of the River Uruguay*[152] to say that the obligation applies not only in the trans boundary context (where it was confined to by the ICJ), but also to other activities conducted in ABNJ. This was based on the reasoning that the Area and its resources are 'a shared resource' due to being a part of the common heritage of mankind.[153]

151 Advisory Opinion, ISA, as above n 146.
152 As above, at [148].
153 As above.

This argument seems a little bit tenuous, but is arguably possible for the Authority to begin requiring EIAs where activities are being conducted in the Area, firstly because the Authority is an internationally competent organisation and so is an easily identifiable stakeholder in activities that are in the Area, or in ABNJ that will impact on the Area. Secondly, the Authority has a mandate to protect and preserve the marine environment of the Area.[154] This is, however, a large step for the Chamber to take, because it potentially opens the door to either actions being brought against states by the Authority for failing to conduct an EIA in ABNJ, or for the Authority to begin requesting that all states participating in activities in the Area to conduct EIAs, even when the activities are not related to the exploration or exploitation of the resources of the seabed.

VI Further Developments

A Environmental Impact Assessment Guidelines

There are multiple organisations that have developed 'best practice' or guidelines on EIAs, such as the International Association for Impact Assessment (IAIA) and the CBD. The CBD voluntary guidelines were used as a way to incorporate a greater focus on biodiversity in EIAs.[155]

The Subsidiary Body on Scientific Technical and Technological Advice (SBSTTA) has stated that one of the major problems with the use and implementation of these guidelines in ABNJ is that the criteria for EIAs has been developed to apply to coastal waters and wetlands, [156] which are so different from the deep waters in ABNJ that while the principles and concepts of these guidelines are applicable to ABNJ, the "practicalities of acting on these concepts can be more challenging in ABNJ",[157] and that the annexes to the CBD guidelines will have to

154 Agreement relating to the implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982 1836 UNTS 3 (opened for signature 16 November 1994, entered into force 28 July 1996).
155 Report of the Expert Workshop, as above n 112.
156 As above.
157 As above.

be redone "almost from scratch"[158] if they are to be useful in the ABNJ context. The SBSTTA has been addressing this by developing the guidelines to better apply to the specific context of ABNJ.[159]

One of the requirements for and EIA is that stakeholders are involved in the process, but as discussed above, stakeholders in ABNJ are extremely difficult to identify because communities that could potentially be affected live so far away from the sites. There are also ecological challenges; where there is less scientific understanding about the ecosystems in place in ABNJ. The little scientists have been able to uncover has demonstrated that in ABNJ benthic communities have less productivity than in coastal areas,[160] that a disturbance of their ecosystem or habitat is not only more likely to significantly adversely impact those communities than but also those communities will need longer to recover than in coastal areas.[161]

B Strategic Environmental Assessments

A further issue with EIAs is that they provide an assessment of the impact a particular activity on a particular area of the environment, and do not tend to include a comprehensive evaluation of the *cumulative* impact of human activities, and how the impact of the proposed development would aggravate that cumulative harm. Therefore, the future of EIAs may lie within the development of Strategic Environmental Assessments (SEAs), which are much more comprehensive than the traditional EIA.[162] An SEA is "a formalised, systematic and comprehensive process of identifying and evaluating the environmental consequences of proposed policies, plans or programmes"[163] which is introduced at an early, policy development level, and thus help shape the planning of developments in a broader way than an EIA. It was noted that by the expert workshop of the

158 Oceans Report, as above, n 14, at [15].
159 Kristina M Gjerde and others *Regulatory and Governance Gaps in the International Regime for the Conservation and Sustainable Use of Marine Biodiversity in Areas Beyond National Jurisdiction* (2008) ICUN, Gland, Switzerland.
160 Report of the Expert Workshop, as above n 112.
161 Oceans Report, as above, n 14at [10].
162 Report of the Expert Working Group, as above n 112, at Annex IV.
163 Gjerde and others, as above, n 159.

CBD that the SEAs will allow for many different uses of the oceans to be coordinated across different industries and sectors,[164] thus allowing a comprehensive evaluation of the cumulative impact of human activities in the oceans.

VII Is a new Implementation Agreement the way forward?

The Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond areas of national jurisdiction (the AHOI Working Group) was established by the General Assembly in 2004,[165] in order "to make recommendations to the Assembly on the scope, parameters and feasibility of an international instrument under the United Nations Convention on the Law of the Sea."[166]

It was suggested in 2004 that an implementation agreement may be needed to ensure the continued use and development of these oceans governance tools. [167] Due especially to the fragmentation of conservation processes and systems in the marine environment, [168] along with the general international reluctance to use them in the global area;[169] an international implementation agreement that would cover the legal, regulatory and governance gaps in the UNCLOS regime has been advocated.[170] The AHOI Working Group has been meeting for 10 years now, with the intent to make a decision on whether to negotiate a new implementation agreement due in January 2015:[171]

164Oceans Report, as above, n 14.
165 Oceans and the Law of the Sea Resolution adopted by the General Assembly on 17 November 2004, A/Res/59/24.
166 Letter dated 5 May 2014 from the Co-Chairs of the Ad Hoc Open-ended Informal Working Group to the President of the General Assembly, 5 may 2014, A/69/82 at [1].
167 As above.
168 Letter dated 5 May, as above n 166.
169 Druel, as above n 7, at 5.
170Advance and unedited Co-Chairs' summary of discussions at the Ad Hoc Open-ended Informal Working Group to study issues relating to the conservation and sustainable use of marine biological diversity beyond national jurisdiction, held at the United Nations Headquarters, 1 – 4 April 2014.
<http://www.un.org/depts/los/biodiversityworkinggroup/biodiversityworkinggroup.htm>
171 As above, at [13].

> Many delegations expressed the view that the development of an international instrument under the Convention, in the form of an implementing agreement, was necessary to effectively address issues related to the conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction. Several delegations stated that such an agreement was the only feasible option to ensure that developing countries and small island developing States, in particular, benefited equitably from the conservation and sustainable use of biodiversity beyond areas of national jurisdiction. Many delegations also noted that an implementing agreement would ensure a coordinated, integrated and collaborative approach and assist in addressing shortcomings in implementation and existing gaps by establishing an overarching legal and institutional framework. Many delegations suggested that an implementing agreement could implement, strengthen and elaborate on obligations already embodied in the Convention, such as the general obligation to protect and preserve the marine environment, the obligation to protect and preserve rare or fragile ecosystems as well as the habitats of depleted, threatened or endangered species or other forms of marine life, the duty to cooperate on a global or regional basis for the protection and preservation of the marine environment, the duty to undertake environmental impact assessments and publish or communicate reports of the results of such assessments to the competent international organizations, as well as other relevant parts of the Convention related to the conservation and sustainable use of marine biodiversity beyond areas of national jurisdiction.

This is, however, likely to be a long time in the making, simply because state parties to UNCLOS, the UN and the CBD are at this stage unable to agree on what governance or regulatory gaps there are, particularly with regards to the obligation to conduct EIAs.[172] It is clear from the discussion contained within the AHOI Working Group documents that many delegates from many states consider that the legal regime is not the problem, but that the rules and obligations need

172 Warner and Rayfuse, as above, n 84, at 407.

to be better implemented through the current system of international agreements and bodies.[173]

A Discussion and elements of a new implementation agreement

How do we ensure that EIAs fit in to a legal and scientific environmental landscape that is constantly being changed and updated? As science develops our understanding of how marine ecosystems and biological diversity it has become apparent to the author that to adequately assess the impacts of a proposed activity in marine ABNJ, a more integrated assessment may be required, such as the strategic environmental assessment. However, although the SEA may be a better way of determining the impact of proposed activities, the author considers that the value of the EIA is that it has been around for 45 years,[174] and, as discussed above; is widely accepted as a necessary procedure that needs to be undertaken before a development goes ahead. This means that there would be much less institutional and political opposition to the adoption of an increased requirement to conduct EIAs in ABNJ, as opposed to a requirement to conduct an SEA which, due to the nature of the SEA, would require the development of new processes and procedures in many places, along with an increased need for the development of the technical capacity of least developed and developing countries.

Therefore, it is the author's opinion that an implementation agreement is necessary, as evidenced by the fact that in ABNJ, EIAs are the exception rather than the norm. While Strategic Environmental Assessments seem to be the EIA of the future, the wide recognition and acceptance of the EIA is the deciding factor in the opinion of the author. The author considers that environmental reporting is an incredibly important goal to realise, if only because we cannot, make changes to the way we deal with development and the environment until we understand where we and the environment actually stand. In ABNJ, which are not scientifically well understood, a mechanism that will at least provide a level of environmental awareness is the first of a

173Oceans Report, as above, n 14, at 38.
[174] Kersten, as above n 15, at 175.

series of many, many steps toward better developmental decisions and environmental management.

One of the main problems facing adequate governance of the oceans, in the author's opinion, is that there is no real understanding of the cumulative impact of human activities globally, and particularly in relation to the oceans. In a world where about 70 percent of the Earth is under water,[175] the lack of scientific and lay understanding about the marine ecosystem, environment and biodiversity, and the human induced changes on those marine systems is unsustainable and amounts to, in the author's opinion, negligence. The marine environment cannot constantly sustain the impact of human actions, and examples range from overfishing to the dumping of waste. In order for us to begin to address the environmental degradation we have caused, an integrated understanding of how the marine environment has changed, and its current health is incredibly important. EIAs provide a good process for this evaluation, because, as discussed above, an EIA begins with the assessment of the environmental baselines, from which the impact of an action can be determined. This baseline information will play an important role in the determination of cumulative impacts, and the development of an integrated assessment system in the future. But in order for us to get to a place within which strategic environmental assessment is the norm, EIAs need to be broadly adopted at the international level.

B Environmental Outcomes

It is important to understand that EIAs do not require particular environmental outcomes. Instead, they provide a procedure for the gathering of data and relaying of information to decision makers and stakeholders on the specific impact of one particular development, on one particular area. The information provided by an EIA plays an important function in ensuring not only that the decision makers have the facts upon which to base their decision, but the EIAs enable a

175The USGS Water Science School: How much water is there on, in, and above the Earth? <http://water.usgs.gov/edu/earthhowmuch.html>

greater role for the public to participate in decisions that are made that will affect them. As discussed above, one of the supporting principles to the requirement to provide an EIA is the associated duty to inform and consult.

Kersten argues that what makes the EIA system work in the domestic context are the provision of the supporting institutions of electoral accountability, substantive environmental laws and judicial review. As discussed, the EIAs provide information; they do not themselves require compliance with specific environmental standards. [176] Domestically, states create legislation specifying water and air quality standards,[177] pollution discharge standards and other such limits which are intended to maintain the health of the environment.[178] In ABNJ no such standards exist; meaning that activities that are conducted in the high seas are not subject to such standards, unless the originating state has specifically widened the scope of domestic standards to apply to ABNJ when activities are conducted under the originating state's control, via such procedures as flag state jurisdiction.

C Notification and consultation

At a domestic level, the EIAs provide the ability for the public to engage in decisions about the economic and social development of their state, along with providing the ability for the public to engage with their government in determining their environmental goals and standards.

However, this becomes much harder to do when dealing with activities and impacts upon the global commons and ABNJ. When the impact on the environment is in an area where there are no people (as is often the case in the middle of the high seas), then the question becomes; who should be notified and consulted? It is arguable that due to the nature of the high seas as the global commons, then every state and person has an interest in the impacts of the activity upon the marine environment. It is the author's opinion that simply because the

176 Kersten, as above n 15.
177 Craik, as above n 1, at 122.
178 As above, at 122. See also Kersten, as above n 15, at 177.

area is not under the specific jurisdiction of a state this should not mean that an EIA should not be conducted or made available to the public at large to comment upon. It is the author's opinion that people will be interested in the activities that states conduct in ABNJ, and not just from an environmental stand point. At the moment the lack of EIAs for activities in ANBJ means that there is no way for either states or interested parties to informed and to then provide their input to the originating state.

D Thresholds and State Discretion

As discussed above, the discretion that remains with the originating state to determine the threshold at which an EIA would be conducted needs to be tightened and defined. Kees Bastmeijer and Ricardo Roura,[179] in conducting a review of the implementation of the EIA regime contained within the Antarctic Protocol, found that:[180]

> In some instances the level of the EIA required has been pushed downwards so that, for example, permanent infrastructure has been assessed as having no more than 'a minor or transitory impact'. As a result the number of CEEs [Comprehensive Environmental Evaluation] prepared to date has been very small, and – consequently – certain activities have not been the subject of the international scrutiny they could or should have had."

In Antarctica, an area that is outside of any state's sovereign jurisdiction and is thus part of the global commons,[181] there is a lack of "political will" to define substantively the thresholds which trigger the obligation to conduct an EIA.[182] If this is the case in Antarctica, which has some of the most developed environmental rules and safeguards in the world, [183] along with one of the most comprehensive and developed EIA systems,[184] it is imperative in the author's opinion that any implementation agreement provides substantive obligations that not only require EIAs when there is a likelihood of 'significant

179Bastmeijer and Roura, as above n 100, at 217.
180 As above, at 219.
181Bastmeijer and Roura, as above n 100, at 178.
182 As above, at 179.
183 As above , at 184.
184 As above.

harm or pollution', but obligations that make 'significant harm' a scientific threshold, as opposed to one that is determined by the state. This scientific threshold for determination would have the necessary flexibility to develop alongside scientific understanding of the seas in ABNJ. The author considers that the requirement to conduct and EIA should remain a due diligence standard, which help find an appropriate balance between the state's sovereign right to develop and exploit resources, and the duty to prevent harm to the environment.[185]

E A Minimum standard

A minimum standard agreement, which could look something like the Antarctic Protocol,[186] will be necessary to ensure that all EIAs meet the scientific standard, have a biological diversity focus, accurately reflect the impact, and have standardised data. A minimum standards regime would require that every state in conducting an EIA would have a process that meets the minimum scientific standard when undertaking and EIA. A minimum standards agreement would also allow for states to develop EIA systems that are provide a more integrated assessment of economic, social and environmental factors; essentially an SEA. The most important goal of a minimum standards agreement, for the author would be to require harmonisation of state practice, which would result in the reporting of standardised data. A Standardised data requirement would mean that firstly it would be much easier to peer review EIAs, and secondly (and most importantly) would mean that global and regional comparisons will be able to be made, enabling a more comprehensive understanding of the global health of the marine environment in ABNJ. This would be a first step towards understanding the global cumulative impact from human activities.

F An International Repository

It is also necessary that there is an internationally competent body that can act as the repository for all of the EIAs produced that cover

185 Bastmeijer and Koivurova, as above n 2, at 3.
186 Antarctic Protocol, as above n 57. See also Craik, as above n 1, at 104.

activities in ABNJ. This will allow for a harmonised, integrated system of EIAs from which developing a system for SEAs in ABNJ can be based. This repository will also provide a valuable resource for scientists, researchers and stakeholders which will allow for a more global evaluation of the cumulative impacts of human actions in marine areas. The difference in ABNJ is that there is no overarching body that has the ability to review the EIAs that have been provided, nor does there seem to be a body that is able to take EIAs and then provide those EIAs in line with Article 205 of UNCLOS.

G Technical capacity

Least developed and developing nations would need assistance to develop their assessment capabilities, especially when looking to conduct activities in ABNJ, so that least developed developing nations are able to take part in the conservation of the marine environment, and are able to benefit from the sustainable use of marine resources. The AHOI Working Group addressed the issue by stating that:[187]

> It was suggested that an international instrument should promote and establish specific rules for the transfer of technology, including with a view to enhancing the implementation of Part XIV of the Convention. The relevance of the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology was highlighted in that regard by some delegations.

It has been estimated that in coastal areas an EIA will cost not more than one per cent of the actual project costs.[188] However, these costs rise in relation to EIAs in ABNJ. The ability to evaluate the actual effects of planned human activities is difficult within itself due to the dearth of scientific understanding. While this is slowly being addressed, it does mean that any assessment of risk will be harder to determine, as well as being more expensive, both to conduct and also to monitor long term which is significant for least developed and developing nations that want to conduct activities in ABNJ. Therefore, there will need to be strong technology transfer and development assistance in any implementation agreement.

187 Letter dated 5 May, as above n 166.
188As above, at [130].

H The Precautionary principle and Sustainable Development

As part of any implementation agreement, the author considers that a greater focus will need to be placed on the use of the precautionary principle, along with the use of the "test-bed" approach.[189] This approach would require that any proposed activities be permitted in restricted, small scale areas, with stringent monitoring and surveillance conditions so that the impact on the marine environment can be understood, and will then become "a source of better information for more complete assessment of impacts".[190]

As discussed, EIAs are technical instruments that attempt to assess the future impact of a development on the environment. While this does mean that decision makers are made aware of how their decision will impact the environment, this does not mean that the EIAs influence the decision maker towards an environmentally friendly decision. As noted by both Carik and Kersten,[191] an EIA that finds that an activity will have a significant harmful impact on the environment may still go ahead, especially in the international context, because the EIA system is not supported by the same institutions and standards as the domestic context,[192] or because the EIA process is not supported by environmental principles or standards,[193] which force the decision makers to comply with those environmental standards. This is why, in the opinion of the author, any implementation agreement would need to be developed in conjunction with more specific environmental principles and standards, against which decisions made, after an EIA has been conducted, can be measured.

VIII Conclusion

Environmental impact assessments are an essential tool for better oceans governance that enable states and other international organisations to evaluate the potential risks to the environment of

189Oceans Report, as above n 14, at [14].
190 As above.
191 Craik, as above n 1, at 208. See also Kerstren, as above n 15, at175.
192 Kersten, as above.
193 Craik, as above n 1, at 208.

proposed activities. The obligation to conduct an assessment can be found in many international agreements, but there are many gaps in the coverage of the requirement, and even when it is required the obligation has not implemented as widely as it should have been.

One of the largest issues in this area is that although there are obligations placed on states and international organisations to conduct EIAs in ABNJ, those obligations are general rather than substantive, and issues around interpretation of those obligations remain. Other important issues facing the use of EIAs in ABNJ are the lack of international environmental standards that can be applied, the ambiguity and inconsistency at which an EIA is deemed necessary, also the lack of peer review of EIAs that have been produced, and the lack of monitoring and compliance regimes and systems to ensure that the proposed activities comply with any required mitigation measures.

In terms of the obligation to conduct EIAs in ABNJ; the general obligation can be seen in UNCLOS and the CBD, and it has also been developed in international environmental law through principles such as the harm principle, the non-discrimination principle, the precautionary principle and the duty to cooperate, as well as through international case law.

The author recognises that the development and adoption of a new implementation agreement under UNCLOS that requires EIAs will be an uphill marathon, and there are many who question whether such an agreement would be worth the time and trouble, as opposed to implementing the EIA obligations that already exist in international environmental law. However, it is the author's opinion that due to the gaps in the coverage what activities need an EIA before being undertaken, also because of how important EIAs are to providing an understanding of the health of the environment and how we impact that when we conduct activities, and finally because EIAs have been generally accepted at the international level, an implementation agreement that provides a more fully developed requirement to conduct EIAs for activities conducted in areas beyond national

jurisdiction is a tool that is needed to ensure the continued development of international environmental law.

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