

The Ecosystem Approach and the negotiations towards a new Agreement on Marine Biodiversity in Areas beyond National Jurisdiction

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Abstract

The ecosystem approach is an increasingly central concept for addressing the conservation and sustainable use of biological diversity. Endorsed in the mid-1990s as the primary framework of action by the Convention of Biological Diversity, it has subsequently gained traction in a variety of fields and contexts, including ocean governance and fisheries management,** thanks to its promise to overcome the traditionally fragmented management paradigm, and instead facilitate holistic ecosystem governance. Not surprisingly then, the ecosystem approach is one of the suggested guiding principles and/or approaches for a future international legally binding instrument (ILBI) on marine biodiversity in areas beyond national jurisdiction (BBNJ). This article will assess the status of the debate on the ecosystem approach in the BBNJ process, to highlight and analyse risks and opportunities linked to the different modalities of its inclusion in a future ILBI.

1. Introduction

The ecosystem approach is an increasingly central concept for addressing the conservation and sustainable use of biological diversity. Endorsed in the mid-1990s as the primary framework of action by the Convention of Biological Diversity,¹ it has subsequently gained traction in a variety of fields and contexts, including ocean govern-

ance² and fisheries management,³ thanks to its promise to overcome the traditionally fragmented management paradigm, and instead facilitate holistic ecosystem governance. Not surprisingly then, the ecosystem approach is one of the suggested guiding principles and/or approaches for a future international legally binding instrument (ILBI) on marine biodiversity in areas beyond national jurisdiction (BBNJ). This article will assess the status of the debate on the ecosystem approach in the BBNJ process, to highlight and analyse risks and opportunities linked to the

Suppl. 2. Food and Agriculture Organizations of the United Nations 2003.

¹ Decision II/8, 'Preliminary Consideration of Components of Biological Diversity Particularly Under Threat and Action Which Could Be Taken Under the Convention', Jakarta, 6–17 November 1995, UNEP/CBD/COP/DEC/II/8.

² See e.g. Report on the work of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at its Seventh Meeting, ICP-7 Report, 17 July 2006; Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR Convention), adopted 22 September 1992, entered into force 25 March 1998), 2354 UNTS 67; OSPAR Commission, *The North-East Atlantic Environment Strategy of the OSPAR Commission for the Protection of the Marine Environment of the North-East Atlantic 2010–2020*, OSPAR Agreement 2010–2013; Statement on the Ecosystem Approach to the Management of Human Activities, 'Towards An Ecosystem Approach To The Management Of Human Activities', JMM1, Bremen, 25–26 June 2003, Agenda item 6.

³ See e.g. Food and Agriculture Organisation (FAO), *Fisheries Management: The Ecosystem Approach to Fisheries*, *FAO Technical Guidelines for Responsible Fisheries*, No. 4, Suppl. 2. Food and Agriculture Organizations of the United Nations 2003.

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** See e.g. Food and Agriculture Organisation (FAO), *Fisheries Management: The Ecosystem Approach to Fisheries*, *FAO Technical Guidelines for Responsible Fisheries*, No. 4,

different modalities of its inclusion in a future ILBI. The article will proceed as follows. After a brief introduction of the concept of the ecosystem approach in sub-section 1.1, section 2 gives a brief overview of the BBNJ process so far and offers a detailed review of the ways in which the ecosystem approach has been included and discussed in the BBNJ process so far. Section 3 presents an overview of different articulations of the ecosystem approach in international law and at the same time illustrates how the concept remains both ambiguous and contested and is articulated differently in different contexts. Additionally, section 3.3 discusses the relationship between the ecosystem approach and UNCLOS, in order to understand if it is possible to delineate with some precision the concrete normative and operational implications of the ecosystem approach. UNCLOS is key in this sense as it sets out the general framework for ocean governance and that the future ILBI will be an implementing agreement of UNCLOS. Section 4 discusses the role the ecosystem approach could and should have in a future ILBI to ensure its effective and consistent implementation, and ultimately to ensure that the opportunity that the BBNJ process represents is not lost. Finally, section 5 draws some conclusions.

1.1. The Concept of the Ecosystem Approach in Brief

Before reviewing the ways in which the ecosystem approach has been included and discussed so far in the BBNJ process, it will be useful to present the concept in brief by way of outlining its key conceptual elements. The ecosystem approach can be generally described as a 'strategy for the integrated management of land, water and living resources'.⁴ The concept translates key

ontological and epistemological insights of ecology into law, and it rests, broadly speaking, on four interrelated elements: integration, integrity, information and iteration.

Integration reflects the ecological insight that 'everything is connected with everything else'⁵ and that thus any management plan must heed this fact and take a holistic approach. By focusing on integration, the ecosystem approach also challenges the traditionally fragmentary approach of international law. It promises to integrate laws that regulate living resources with laws that regulate pollution and degradation of the physical environment; it aims at integrating, within a transversal ecosystem perspective, fragmented jurisdictional and political boundaries; and it typically aims at integrating the social and the ecological dimensions into a single conceptual and operative framework. The ecosystem approach, additionally, encourages epistemic integration, by incorporating a number of central ecological principles in law, and by drawing on multiple modes of knowledge. Ecological – or ecosystem – *integrity* is in many ways the underlying goal of the ecosystem approach.⁶ While integrity is not always easy to concretely identify⁷ and operationalize,⁸ it aims at maintaining

⁵ B. Commoner, *The Closing Circle: Nature, Man and Technology*, New York, Alfred Knopf, 1971, p. 16.

⁶ Sometimes together with ecosystem health, though the difference between the two is not always entirely clear, V. De Lucia 2016, *The Ecosystem Approach in International Environmental Law. A Biopolitical Critique*, PhD Thesis, UiT The Arctic University of Norway, 2016.

⁷ See in this respect G. De Leo and S. Levin, 'The Multifaceted Aspects of Ecosystem Integrity', 1:1, *Conservation Ecology* 1997, 3 and more recently G. Steinhoff, 'Ecological Integrity in Protected Areas: Two Interpretations', *Seattle Journal of Environmental Law*, 3, 2013, 155. There is however a significant literature that tries to do precisely that, primarily stemming from the work of the Global Ecological Integrity Group, see e.g. L. Westra, 'Ecological Integrity', in C. Mitcham (ed.) *Encyclopedia of Science, Technology, and Ethics*, Vol. 2, Detroit: Macmillan Reference USA, 2005.

⁸ For an attempt see R. Kim, and K. Bosselmann 'Op-

⁴ Decision V/6 'Ecosystem Approach', Nairobi, 15–26 May 2000, UNEP/CBD/COP/DEC/V/6.

certain key functions, structural elements and composition of ecosystems in order to ensure the conservation of biological diversity and the protection and preservation of the relevant ecosystems. *Information* refers to the crucial role that knowledge has for the implementation of the ecosystem approach. Detailed knowledge of ecosystem processes and of baseline conditions are paramount in order to understand what are the key stressors and for assessing whether a measure or plan is working. This last aspect links to the final element, *iteration*. Any ecosystem management measure needs to be iteratively assessed so as to respond to changes in existing conditions, to the variability of natural processes and to the responses of ecosystems to various stressors and to management measures themselves.⁹

2. The Ecosystem Approach in the BBNJ process

2.1. The BBNJ Process in Brief

The process towards a new global treaty on the conservation and sustainable use of marine biodiversity in areas beyond national jurisdiction (BBNJ) started 15 years ago, as the international community recognized the existence of a series of important legal and governance gaps and underlined the urgency of developing norms and mechanisms aimed at protecting BBNJ.¹⁰ In 2004, the General Assembly of the United Nations

erationalizing Sustainable Development: Ecological Integrity as a Grundnorm of International Law', *Review of European, Comparative & International Environmental Law*, 24:2, 2015, 194.

⁹ Adaptive management is for example one of the four operational guidelines adopted within the context of the CBD as an annex to the Malawi Principles in Recommendation V/10 on 'Ecosystem approach: further conceptual elaboration', in the Report of the Fifth Meeting of the Subsidiary Body on Scientific, Technical and Technological Advice Montreal, 31 January–4 February 2000, Canada, UNEP/CBD/COP/V/10.

¹⁰ Report of the Open-ended Informal Consultative Process on Oceans and the Law of the Sea, 26 June 2003, UN Doc. A/58/95, para 98ss.

(UNGA) established an Ad Hoc Open-ended Informal Working Group (BBNJ WG) to study the issues further,¹¹ and in 2011 the BBNJ WG recommended that a 'process be initiated' towards the development of a multilateral agreement under UNCLOS on BBNJ.¹² The report also identified four substantive areas that would need to be addressed, 'together and as a whole'¹³ by one such process: marine genetic resources, including questions on the sharing of benefits, measures such as area-based management tools, including marine protected areas, and environmental impact assessments, capacity-building and the transfer of marine technology.¹⁴ In 2015,¹⁵ on the basis of the recommendations of the final report of the BBNJ WG,¹⁶ UNGA decided to move forward with the development of a new treaty.¹⁷ UNGA decided thus to launch a preparatory committee (PREPCOM) aimed at developing 'elements of a draft text of an international legally binding instrument'.¹⁸ The PREPCOM held four meetings between 2015 and 2017, and submitted its report to UNGA in July 2017. The report

¹¹ Resolution adopted by the General Assembly on 17 November 2004, UN Doc. A/RES/59/24, para 73.

¹² Letter dated 30 June 2011 from the Co-Chairs of the Ad Hoc Open-ended Informal Working Group to the President of the General Assembly, UN Doc. A/66/119, Annex, Section I "Recommendations", para 1(a).

¹³ This expression indicates the goal of pursuing the negotiating agenda as a package deal, that is, either there is agreement on all the elements or no agreement at all.

¹⁴ *Ibid.*, para 1(b).

¹⁵ Resolution adopted by the General Assembly on 9 December 2013, UN Doc. A/RES/68/70, para 198–200, para 198.

¹⁶ Letter dated 13 February 2015 from the Co-Chairs of the Ad Hoc Open-ended Informal Working Group to the President of the General Assembly, Annex, Section I "Recommendations", UN Doc. A/69/780, para 1(e) (hereinafter BBNJ WG Recommendations).

¹⁷ UNGA Res. A/69/292 'Development of an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction', 19 June 2015.

¹⁸ *Ibid.*

recommended UNGA to convene an intergovernmental conference (even though it did not reflect consensus),¹⁹ and UNGA did launch a formal intergovernmental conference (IGC) on 24 December 2017.²⁰ The resolution has scheduled four substantive sessions and a preliminary organizational meeting. At the time of writing, the IGC has held the organizational meeting in April 2018, and three substantive sessions. The IGC shall consider the recommendations of the PREPCOM report,²¹ which thus remains an important starting point for the IGC negotiations.²²

2.2. The Ecosystem Approach at the PREPCOM

Already during the very early phase, the ICP-7 report recognized that the ecosystem approach would be invaluable to avoid fragmentation,²³ and to 'build a global legal regime that allowed for an integrated assessment of human activities and their interactions with the marine environment'.²⁴ The BBNJ WG report further recognized that several delegations agreed on the fact that a future agreement should incorporate widely accepted principles of ocean governance, such as the ecosystem approach.²⁵ It was however the

PREPCOM that more concretely recommended that the text of a future ILBI 'would set out the general principles and approaches guiding the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction', and indicated specifically the ecosystem approach among the '[p]ossible general principles and approaches'.²⁶ The IGC offers further indication as to the potential role of the ecosystem approach in a BBNJ agreement, even though, as we will see, it has not found much room in the debates except indirectly. It is in this respect the PREPCOM phase that provides most relevant documentation (such as submissions, chair's documents, the report), so this sub-section will focus on the PREPCOM, and a shorter, subsequent, sub-section will assess the status of the discussion at the IGC to date.

Ecosystem approaches were from the initial stages of the PREPCOM included as one of the potential 'guiding principles and approaches', both in general and in relation to ABMTs and EIAs more specifically.²⁷ In the Chair's Overview of PREPCOM II, the ecosystem approach is mentioned twice under the heading 'possible areas of convergence of views' in relation to area-based management tools and cross-cutting issues.²⁸ This inclusion is not surprising given the traction the concept has gained in international

¹⁹ Report of the Preparatory Committee established by General Assembly resolution 69/292: Development of an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, 31 July 2017, UN Doc. A/AC.287/2017/PC.4/2, Part III, para 38(a).

²⁰ UNGA Res. A/RES/72/249 'International legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction'.

²¹ *Ibid.*, para 1.

²² Statement by the President of the Conference at the closing of the organizational meeting, UN Doc. A/CONF.232/2018/2.

²³ ICP-7, para 79.

²⁴ ICP-7, para 90.

²⁵ "Outcome of 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 and Co-Chairs' summary of discussions", UN Doc. A/69/780, paragraph 22 of the document observed how "[s]everal delegations noted that a legally binding agreement should incorporate widely accepted principles of ocean governance, such as the precautionary principle, integrated ocean management and an ecosystem approach".

²⁶ PREPCOM Report, Section III, para 1.

²⁷ Chair's overview of the first session of the Preparatory Committee, respectively p. 5, 9 and 12, http://www.un.org/depts/los/biodiversity/prepcom_files/PrepCom_1_Chair's_Overview.pdf accessed on 2 December 2018.

²⁸ Chair's overview of the second session of the Preparatory Committee, Appendix 2 and 5 respectively relating to ABMTs and to cross-cutting issues, <http://www.un->

law. What is perhaps surprising is the *dearth* of submissions that do little more than mentioning the ecosystem approach as a suitable guiding principle. These are certainly welcome suggestions, and an important first step. Yet Norway is the only State that has to date indicated its interest in a detailed elaboration of the ecosystem approach in the ILBI. Norway's submission suggests that the ecosystem approach be one of the overall objectives of the ILBI; and that it 'should be clearly defined'.²⁹ The submission indeed offers a definition derived from the World Summit on Sustainable Development (WSSD).³⁰

The most concrete and interesting suggestion for the inclusion of the ecosystem approach comes from submission of WWF. WWF suggests that the ecosystem approach should be one of the general guiding principles/approaches of the future ILBI, and be included also in the general objectives of the ILBI, something which was taken up by the PREPCOM Chair in its February 2017 Non Paper.³¹ However, and importantly, WWF further suggests that the parties should adopt an Annex to the ILBI containing the rules necessary to guide the implementation of the ecosystem approach. The idea is to follow the model of the Fish Stocks Agreement (FSA), where Annex II guides the operationalization of the precautionary approach. The Annex, in WWF's view, should form 'an integral part of the agreement'³² borrowing again from the FSA, where Article 48

establishes the integral nature of the Annexes to the main agreement.

WWF's submission also considers aspects related to institutional set-up and to the production, gathering and dissemination of scientific knowledge. In this respect, WWF imagines the creation of two bodies. A governing body would, *inter alia*, serve the role of 'overseeing/supervising the implementation of the implementing agreement, including the operationalisation of ecosystem-based integrated oceans management in areas beyond national jurisdiction'³³. As scientific and technical subsidiary body would provide 'scientific and technical assistance in operationalising ecosystem-based integrated oceans management at appropriate biogeographic scales'.³⁴

Finally, WWF proposes the creation of a clearing-house mechanism or online repository, with the purpose of 'information sharing and dissemination'. This would facilitate implementation of the ecosystem approach by providing continuous and updated biological, ecological and oceanographic information, 'as well as pressures, stressors, activities and uses of the marine space'.³⁵ This type of information, suggests WWF, and it is difficult to disagree, would be necessary and essential in relation to 'the assessment of cumulative impacts',³⁶ as well as in relation to various forms of impact assessments, and for the informed development of an effective network of MPAs, and more broadly for ecosystem-based ocean management plans.

During PREPCOM III, the ecosystem approach has only been mentioned indirectly, while referring to other, more central issues (either the agenda items, or the cross-cutting issues). However, themes and questions relevant

.org/depts/los/biodiversity/prepcom_files/Prep_Com_II_Chair_overview_to_MS.pdf accessed 2 December 2018.

²⁹ Norwegian input December 2016, PREPCOM III, p. 2, http://www.un.org/depts/los/biodiversity/prepcom_files/rolling_comp/Norway.pdf, accessed 2 December 2018.

³⁰ *Ibid.*, p. 2.

³¹ Chair's non-paper on elements of a draft text of an international legally-binding instrument under UNCLOS, p. 13, http://www.un.org/depts/los/biodiversity/prepcom_files/Chair_non_paper.pdf, accessed 28 November 2018.

³² WWF Submission, p. 2.

³³ WWF Submission, p. 9.

³⁴ WWF Submission, p. 10.

³⁵ WWF Submission, p. 10.

³⁶ WWF Submission, p. 10.

for the ecosystem approach, and for understanding how the ecosystem approach may in fact be included in the new BBNJ agreement, were aired in multiple occasions, especially in relation to environmental impact assessments.

Both the February 2017 Chair's non-paper and the Streamlined Chair's non-paper, which summarizes the former, prepared respectively prior to PREPCOM III and PREPCOM IV to assist delegations, include the definition provided by WWF.

Ecosystem-based management means an integrated approach to management that considers the entire ecosystem, including all stakeholders and their activities, and resulting stressors and pressures with direct or indirect effects on the ecosystem under consideration. The goal of ecosystem-based management is to maintain or rebuild an ecosystem to a healthy, productive and resilient condition, through, inter alia, the development and implementation of cross-sectoral ecosystem-level management plans³⁷

It is useful to note that the definition (like the one offered by Norway) refers to 'ecosystem-based management', rather than to ecosystem approach, something which is important and which I will return to later. The ecosystem approach is also included as guiding principle and/or approach under two agenda items, EIAs and MPAs. The extent of the inclusion of the ecosystem approach in the PREPCOM report, finally, which forms the substantive platform for the IGC negotiations, is limited to its being one of the possible guiding principles and/or approaches the ILBI 'could include'.³⁸

³⁷ Chair's streamlined non-paper on elements of a draft text of an international legally-binding instrument under UNCLOS, p. 6, http://www.un.org/depts/los/biodiversity/prepcom_files/Chairs_streamlined_non-paper_to_delegations.pdf, accessed 28 November 2018.

³⁸ PREPCOM Report, Section III/1, p. 11.

2.3. The Ecosystem Approach at the IGC

The IGC has reached its half point, with two of the four substantive sessions already having been held. Prior to the substantive meetings, a preliminary and organizational meeting was held in April 2018. This organizational meeting was important in many respects, and especially for the election of the President of the IGC, Ambassador Rena Lee, which has so far proved to be a very significant choice. During the first substantive session of the IGC, held in September 2018, progress has been on the other hand made, at least on a number of points, not in small part thanks to the document prepared by the President, upon request of the Conference, to aid discussions and keep them structured and focused.³⁹ However, many delegations referred back to their PREPCOM submission, and general the PREPCOM report was the initial platform for the discussions. Accordingly, not much progress has been made with respect to the ecosystem approach, which was mentioned to be sure by a number of delegations as one of the necessary guiding principles, both in general, and in relation to specific topics such as area-based management,⁴⁰ environmental impacts assessments,⁴¹ or marine genetic resources.⁴² While IGC-1 was a preliminary step, as much of the discussions took the form of exchange of views, expectations for IGC-2 were high. IGC-1 had given President

³⁹ IGC President, Rena Lee, 'President's aid to discussions', UN Doc. A/CONF.232/2018/3.

⁴⁰ Thus e.g. the interventions of the EU, Switzerland and Senegal of 7 September 2018 in relation to agenda item 4.1 of the President's aid to discussions ("Objectives of area-based management tools, including marine protected areas"), personal notes.

⁴¹ Thus e.g. the interventions of Egypt of 11 September 2018 in relation to agenda item 5.8.3 of the President's aid to discussions ("General principles and approaches"), personal notes.

⁴² See e.g. Statement by the President of the conference at the closing of the first session, UN Doc. A/CONF.232/2018/7, p. 21.

Rena Lee mandate for producing a document that should enable IGC-2 to shift focus. Delegations would no longer simply exchange of views but would engage in text-based (or at least text-led) negotiations. This document, called Aid to Negotiations,⁴³ included, in accordance with the mandate received at IGC-1, all existing options. The pace of progress at IGC-2 however has been at best ambiguous. While some delegations remained optimistic,⁴⁴ others were appalled by the lack of progress, especially on key issues.⁴⁵ The ecosystem approach did not receive particular attention at IGC-2,⁴⁶ while its inclusion in the Aid to Negotiations merely reflected earlier documents and was rather limited.⁴⁷

⁴³ President's Aid to Negotiations, UN Doc. A/CONF.232/2019/1, <https://undocs.org/A/CONF.232/2019/1>.

⁴⁴ United Nations Meetings Coverage and Press Releases, "Delegates Hail Positive Progress on New High Seas Treaty, as Second Session of Intergovernmental Negotiations Concludes", 5 April 2019, <https://www.un.org/press/en/2019/sea2102.doc.htm>.

⁴⁵ Some indeed expressed outright frustration at what they felt was a pervading sense of *déjà vu*, and there was a sense that on some key issues positions remained "diametrically opposed", respectively ENB, "BBNJ IGC-2 Highlights: Monday, 25 March 2019", Vol. 25 Number 186, p. 2 (hereinafter ENB 25 March) p. 2 and ENB, Summary of the Second Session of the Intergovernmental Conference on an International Legally Binding Instrument under the UN Convention on the Law of the Sea on the Conservation and Sustainable Use of Marine Biodiversity of Areas Beyond National Jurisdiction: 25 March–5 April 2019, Vol. 25 Number 195 (hereinafter ENB Summary), p. 18.

⁴⁶ IGC-2 indeed focused mostly on "the mechanisms to be built, the processes to be developed and the roles of the various actors", Intergovernmental conference on an international legally binding instrument under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction Second session, 25 March – 5 April 2019 Statement by the President of the conference at the closing of the second session, p. 3, https://www.un.org/bbnj/sites/www.un.org/bbnj/files/bbnj_-_igc2_-_presidents_closing_statement_-_advance_unedited_version.pdf.

⁴⁷ And it was limited to inclusions in the list of possible general principles and approaches for the whole ILBI (air to negotiations, p. 8) or in relation to area-based manage-

ment tools and environmental impact assessments (ibid. respectively p. 9 and 10), as one of the possible principles and approaches guiding benefit-sharing (ibid. p. 16), and as a reference for the designation of marine protected areas (ibid. p. 27).

However, some of the key elements of an ecosystem approach were discussed individually across the negotiating agenda. For example, in the context of the working group on environmental impact assessments (EIAs), the question of when an assessment would be required attracted much debate. Some delegations argued that any EIAs rules adopted in the ILBI should only be applicable to activities that take place in ABNJ (the activity-oriented approach); others by contrast insisted that every activity that has impacts on ABNJ should be covered by the EIAs rules (the impact-oriented approach). This is clearly an important question from the perspective of an ecosystem approach, to the extent that in one case the legal framework would be inclusive and cut across maritime zones, and in the other it would remain constrained by jurisdictional lines. It must be noted however, that already today UNCLOS sets out obligations to carry out impact assessments for any activities under the jurisdiction and control of a State regardless of where the impacts may occur, so a limitation in the ILBI would arguably run counter the general principles already enshrined in UNCLOS.⁴⁸ A second example that further illustrates how, even if explicit discussion on the ecosystem approach was lacking, some of its elements have been discussed individually under different items, relates to cumulative impacts. Cumulative impacts were discussed especially in relation to EIAs and ABMTs. The importance of the concept of cumulative impacts, which is a crucial element of the ecosystem approach, was concisely expressed by the delegation of the Federate States of Micronesia, which observed how

ment tools and environmental impact assessments (ibid. respectively p. 9 and 10), as one of the possible principles and approaches guiding benefit-sharing (ibid. p. 16), and as a reference for the designation of marine protected areas (ibid. p. 27).

⁴⁸ UNCLOS, artt. 204-206.

it is not possible to conserve ocean biodiversity without taking into consideration cumulative impacts.⁴⁹ Many of the reference to the need to include explicit mention of the concept in the ILBI related to the debate on strategic environmental assessment, which remains at this point very much an open question. For our purposes however, the point to be made is that, while the ecosystem approach has not been discussed organically or systematically, some of its constituent elements have been. The main question then is whether these separate discussions may lead to a coherent articulation of an ecosystem approach in the ILBI. The answer is probably that one such outcome is unlikely without fully articulating an explicit framework. An important consideration in this respect is that debates on these points are still open and while some positive convergence existed on cumulative impacts (with some notable exceptions),⁵⁰ significant resistance remained in relation to the scope of EIAs, to strategic environmental assessment and to inclusive ecosystem-oriented language on the part of key delegations.

As the IGC-2 drew to a close, delegations considered the way forward, and agreed that the President should prepare a document that would enable text-based negotiations. Such a document, which would need to take into account the various proposals made during IGC-2, “would likely be structured in a form more akin to a treaty, and containing treaty language”.⁵¹ The document circulated by the President at the end of June 2019 was accordingly a draft treaty text “aimed at streamlining the options contained in the President’s aid to negotiations, including, in-

ter alia, by merging options where possible”.⁵² Additionally, the draft document was structured like a treaty and “contains treaty language with provisions addressing each of the four topics identified in the package agreed in 2011, as well as cross-cutting issues”.⁵³

Importantly, the President emphasized in the note accompanying the draft text, that while “efforts were made to take into account the views expressed and proposals made during the first two sessions of the Intergovernmental Conference, not every delegation’s preferred option or language may be reflected in the text”.⁵⁴ The President also underlined, that in some cases “new language has been proposed in the light of suggestions made during the discussions and drawing from the provisions of existing instruments”, with the goal of offering a way forward.⁵⁵

To further facilitate the shift in negotiating modus, the working method included scheduling so-called informal informals meetings. These were smaller and less formal meetings than the informal working group, and were meant to facilitate more focused and open negotiations that should allow easier bridging of existing gaps. To this end, access to these meetings was also restricted for observers,⁵⁶ in order to maintain confidentiality and ensure an environment conducive to frank and productive negotiations.

What is most interesting for our purposes is that the ecosystem approach no longer appeared in the tentative list of general principles and

⁴⁹ Federated States of Micronesia, 28 March 2019, personal notes.

⁵⁰ Such as China, April 1 2019, personal notes.

⁵¹ Statement by the President of the conference at the closing of the second session, A/CONF.232/2019/5, p. 2.

⁵² Draft text of an agreement under the United Nations Convention on the Law of the Sea on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction, UN Doc. A/CONF.232/2019/6, para 6.

⁵³ *Ibid.*, para 5.

⁵⁴ Draft text, para 6.

⁵⁵ *Ibid.*

⁵⁶ IGOs and NGOs were assigned up to 5 seats each for each informal informal. Each group would negotiate internally how to allocate among the different organizations.

approaches contained in draft article 5.⁵⁷ However, the text mentions an integrated approach (or principle),⁵⁸ but it is not clear whether and to which extent that may also include or make reference to the ecosystem approach. The discussion on draft article 5 on general principles and approaches took place in two steps. First the President sought comments on the exiting list. Noteworthy in this respect is the intervention from Japan, which observed how the list has never been discussed fully in the IGC, and pointed out how there are more important principles (including the ecosystem approach) that have disappeared.⁵⁹ Subsequently the President opened the floor for interventions on which additional principles should be added to the list. It appeared clear at this point that there was widespread support among delegations for the inclusion of a specific reference to the ecosystem approach,⁶⁰ something which had already been remarked upon by Eritrea.⁶¹

Outside of this convergence of views as to the inclusion of the ecosystem approach in the list under article 5, no substantive discussion took place, with the exception of an interesting remark by Eritrea, which observed that if the ILBI is to adopt an ecosystem approach, there will be a need to ensure a uniform application of UNCLOS to all resources – as maritime zones are inseparable ecosystems.⁶² The intervention was in relation to draft article 9 on “Activities

with respect to marine genetic resources of areas beyond national jurisdiction”, but it is interesting as it has been the only intervention during the IGC-3 that has explicitly problematized the misalignment between an ecosystem perspective and the jurisdictional boundaries enshrined in UNCLOS.⁶³

It is finally useful to note how, like during IGC-2, some of the key elements of an ecosystem approach were discussed individually across the negotiating agenda. On these elements however, no consistent progress could be detected in IGC-3. For example, while there was “consensus” on the need to include cumulative impacts in the conduct of EIAs, albeit the modalities of this inclusion still require significant discussion, and no convergence exist yet on whether to include explicit reference to climate change and ocean acidification.⁶⁴ Additionally, no clear agreement still exist on whether the ILBI should adopt an impact-oriented or an activity-oriented approach,⁶⁵ and the question of SEA, which is in many ways crucial for an effective implementation of the ecosystem approach, remains in need of much discussion.⁶⁶

The ecosystem approach is also mentioned in Part II of the draft text on the topic of “Measures Such As Area-Based Management Tools, Including Marine Protected Areas”, and more specifically in article 16 on the “Identification of areas requiring protection” and in article 17

⁵⁷ Draft text, draft article 5, p. 7.

⁵⁸ Ibid.

⁵⁹ Japan, IGC-3, 28 August, 2019, personal notes.

⁶⁰ IGC-3, 28 August 2019, 3–6 p.m., Informal working group on cross-cutting issues, personal notes. See also Earth Negotiations Bulletin, *Summary of the Third Session of the Intergovernmental Conference (IGC) on the Conservation and Sustainable Use of Marine Biodiversity of Areas Beyond National Jurisdiction: 19–30 August 2019*, Vol. 25 No. 218, Monday, 2 September 2019 (hereinafter ENB Summary IGC-3), p. 9.

⁶¹ Eritrea, IGC-3, 28 August 2019, personal notes.

⁶² Eritrea, IGC-3, 28 August 2019, personal notes.

⁶³ However, commentators have pointed out the need to harmonize legal regimes across jurisdiction, see in particular J. Mossop, ‘Towards a Practical Approach to Regulating Marine Genetic Resources’, 8:3 ESIL Reflections, 2019. It is also to be noted that Eritrea’s intervention aimed at mobilizing the ecosystem approach to support the need to include MGRs under the common heritage of mankind regime, see ENB Summary IGC-3, cit., p. 7.

⁶⁴ ENB Summary IGC-3, p. 11.

⁶⁵ With both approaches getting some support, as the facilitator Lefeber reported from the informal informal on EIAs, ENB Summary IGC-3, p. 11.

⁶⁶ Ibid.

on “Proposals”.⁶⁷ The ecosystem approach is identified therein respectively as one of the bases to use for the identification of areas requiring protection and as one of the bases for the proposals.⁶⁸ A final mention is contained in article 21 on “Monitoring and Review”, where the ecosystem approach is indicated as one of the bases for proposing amendments or revocations of an ABMT.⁶⁹

3. Ecosystem Approaches in International Law

3.1. Introduction

While there is convergence on the inclusion of the ecosystem approach in a future ILBI, there remains at this stage a conspicuous lack of details, and only two PREPCOM submissions argued a definition was necessary and offered suggestions in that sense. This raises some problems, as simple reference to the ecosystem approach does not reveal what sort of role it may have in a future ILBI. The most significant problem is that such an approach entails the assumption that the ecosystem approach is easily identifiable (if not definable) outside of the ILBI. However, the ecosystem approach is affected by important ambiguities that render its delineation problematic.⁷⁰ This consideration reflects the fact that the ecosystem approach, notwithstanding the general elements outlined in sub-section 1.1, is stretched between competing narratives, is the result of a

complex set of contingencies and contestations,⁷¹ and has been developed in different ways in different contexts, so that it is perhaps best to speak of ecosystem approaches in the plural. Additionally, failing to delineate with sufficient clarity and precision what an ecosystem approach entails is likely to make its operationalization very difficult. Hence, the meaningful integration of the ecosystem approach in the ILBI is to a significant degree dependent on the modality of its inclusion. To further complicate matters, the PREPCOM documents and submissions do not offer a consistent terminology (a potentially important fact, given that different terms may also entail a significant conceptual difference).⁷²

So, if the ecosystem approach is not defined and delineated in the ILBI, its scope, content and operational details must be drawn from elsewhere, but where?

3.2. Searching for the Ecosystem Approach in UNCLOS: Methodological Perspectives

While there is a great variety of reference points and normative clusters that deploy the concept and framework of the ecosystem approach, UNCLOS remains the overarching legal framework for the governance of the oceans as well as the explicit normative reference for the IGC.⁷³ The focus should be thus in the first instance on UNCLOS.

However, UNCLOS was negotiated and adopted prior to the ecosystem approach be-

⁶⁷ Though Canada suggested that the reference to the ecosystem approach (as well as the other principles mentioned in the provisions) be rather moved to the general part of the agreement, ENB Summary IGC-3, p. 8.

⁶⁸ Ibid., draft article 16 and 17, p. 15.

⁶⁹ Ibid., draft article 21, p. 20.

⁷⁰ See e.g. V. De Lucia, ‘Competing Narratives and Complex Genealogies: The Ecosystem Approach in International Environmental Law’, 27:1 *Journal of Environmental Law*, 2015, 91.

⁷¹ Ibid. and esp. V. De Lucia, *The Ecosystem Approach in International Environmental Law. Genealogy and Biopolitics*, Routledge 2019a.

⁷² See on this point De Lucia 2015 op. cit. and De Lucia 2019a op. cit. However, the terminological differences may simply have been introduced inadvertently on the part of the delegations.

⁷³ The mandate of the IGC is in fact delimited by language that requires the new treaty, its implementation as well as the process leading to it, to be consistent with UNCLOS, see UN Doc. A/RES/72/249.

coming the important and widely adopted framework that it is today, hence there is no direct indication or mention of the ecosystem approach in UNCLOS provisions. However, there is a question of whether UNCLOS includes the ecosystem approach based on a number of considerations, such as its framework character and the open-ended nature of its provisions. From this perspective, UNCLOS provisions included in Part XII, and especially article 192, can and should be interpreted so as to adapt to new norms and circumstances,⁷⁴ including importantly the entire 'corpus of international law relating to the environment',⁷⁵ of which the ecosystem approach is part. With this consideration in mind, this sub-section will address from different angles the question of whether the ecosystem approach is, or can be, included in UNCLOS. The following subsection will in turn offer a brief overview of how the ecosystem approach is articulated in other ocean or environmental legal regimes also relevant for the BBNJ process.

As mentioned, the negotiation and adoption of UNCLOS predates the rise of the ecosystem approach in international law. However, a number of scholars suggest that UNCLOS already contains, at least in implicit and precursory ways, an ecosystem approach to marine environmental protection and to fisheries management.⁷⁶ Based on this existing scholarship, and on the broader

scholarship on the ecosystem approach, I suggest it is possible to approach the relationship between the ecosystem approach and UNCLOS (and more generally any legal regime) by way of two different routes: the ecosystem route, and the essential equivalence route.⁷⁷

The *ecosystem* route takes a formal approach and starts from the fact that the ecosystem approach is fundamentally linked to the concept of ecosystem. From this perspective, any environmental regime that deploys the concept of ecosystem from which specific legal consequences can be drawn, can be characterized as taking an ecosystem approach. This perspective leads some commentators to see the ecosystem approach in a wide variety of regimes not only directly or explicitly, but also implicitly and indirectly. The ecosystem approach is thus at work, for example, in the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR);⁷⁸ in the UN Fish Stock Agreement;⁷⁹ in the UN Convention on the Law of the Non-Navigational Uses of International Watercourses (Watercourses Convention);⁸⁰ and in the Agreement on the International Dolphin Conservation Program.⁸¹ UNCLOS is also considered by some scholars,⁸² as we shall see presently.

⁷⁴ ICJ, *Gabcikovo-Nagymaros*, Judgment, ICJ Reports 1997, esp. paras 112 and 140.

⁷⁵ PCA, *Philippines v. China*, 2013/19, para 941.

⁷⁶ See e.g. M. Besky, 'Using Legal Principles to Promote the "Health" of an Ecosystem', *Tulsa Journal of Comparative and International Law*, 3, 1995, 183; J. Morishita, 'What is the ecosystem approach for fisheries management?', *Marine Policy*, 32, 2008, 19; A. Fabra and V. Gascón, 'The Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) and the Ecosystem Approach', *International Journal of Marine and Coastal Life*, 23, 2008, 567; H. Wang, 'Ecosystem Management and Its Application to Large Marine Ecosystems: Science, Law, and Politics', *Ocean Development & International Law*, 35:1, 2004, 41.

⁷⁷ This is part of a larger analytical framework that I have articulated in full in De Lucia, 2019a, op. cit., esp. chapter 4.

⁷⁸ Fabra and Gascón, 2008, op. cit.

⁷⁹ See e.g. E. Metzger, *The Quest for Sustainable International Fisheries. Regional Efforts to Implement the 1995 United Nations Fish Stock Agreement*, Ottawa: NRC Research Press, 2009.

⁸⁰ See e.g. O. McIntyre, 'The Emergence of an "Ecosystem Approach" to the Protection of International Watercourses Under International Law', *Review for European, Comparative and International Environmental Law*, 13:1, 2004, 1.

⁸¹ Thus Y. Tanaka, *A Dual Approach to Ocean Management. The Cases of Zonal and Integrated Management in International Law*, Aldershot: Ashgate, 2008, p. 78.

⁸² Thus e.g. Belsky, 1995, op. cit.; Morishita, 2008, op. cit.; Wang, 2010, op. cit.

There is, however, a second, yet in many ways overlapping, route that I call the *essential equivalence* route. This route takes a substantive approach, as it reads the ecosystem approach into legal regimes based on whether a particular regime *essentially* or *effectively* incorporates an ecosystem approach, even if there is no formal deployment of the concept or language of ecosystem. This implicit inclusion can be inferred from ‘broad consideration of biodiversity and the importance of the natural environment and its related functions and services’.⁸³ In this respect, the ecosystem approach is read into UNCLOS,⁸⁴ the Ramsar Convention⁸⁵ and CITES.⁸⁶ FAO also follows a ‘substantive’ line of reasoning, and takes the view that while the specific language of the ecosystem approach ‘may not yet be common in international instruments, regional conventions or arrangements and national legislation, the underlying principles and conceptual objectives examined above appear in many of them’.⁸⁷

⁸³ Metzger, 2009, *op. cit.*, p. 144. Metzger lists in this respect the Convention on Wetlands of International Importance especially as Waterfowl Habitat of 1971, the Convention on International Trade in Endangered Species of Wild Flora and Fauna of 1973 and the Bonn Convention on the Conservation of Migratory Species of Wild Animals of 1979.

⁸⁴ Thus e.g. Morishita 2008, *op. cit.*

⁸⁵ C. Finlayson *et al.*, ‘The Ramsar Convention and Ecosystem-Based Approaches to the Wise Use and Sustainable Development of Wetlands’, *Journal of International Wildlife Law & Policy*, 14:3/4, 2011, 176, p. 191.

⁸⁶ D. Currie, *Ecosystem-Based Management in Multilateral Environmental Agreements: Progress towards Adopting the Ecosystem Approach in the International Management of Living Marine Resources*, WWF, 2007, p. 39, http://assets.panda.org/downloads/wwf_ecosystem_paper_final_wlogo.pdf, accessed 20 November 2018.

⁸⁷ S. Garcia *et al.*, *The Ecosystem Approach to Fisheries: Issues, Terminologies, Principles, Institutional Foundations, Implementation and Outlook*, FAO Fisheries Technical Paper 443, Rome: Food and Agriculture Organization of the United Nations, 2003, p. 6, p. 15. Thus also T. Aqorau, ‘Obligations to protect marine ecosystems under international conventions and other instruments’ in M. Sinclair and G. Valdimarsson (eds) *Responsible fisheries in the*

3.3. The Ecosystem Approach in UNCLOS

Having presented some relevant methodological aspects, we can now turn to UNCLOS. Starting with the ecosystem route, some scholarship reads the incorporation of an ecosystem approach in UNCLOS based on the inclusive language used to qualify the duties of States to protect the marine environment. In particular, the term environment includes, under UNCLOS ‘rare and fragile ecosystems as well as habitat of depleted, threatened or endangered species and other forms of marine life’,⁸⁸ a formulation which, Belsky argues, implies an ecosystem orientation.⁸⁹ Similarly Morishita considers that sufficient evidence of the ecosystem approach being included in UNCLOS is offered by the use of the term ‘ecosystem’ in the language of the Convention.⁹⁰

However, it is the essential equivalence route that promises to be the most fruitful approach. Indeed, despite the fact that UNCLOS is ‘conspicuously silent about the ecosystem approach’,⁹¹ it is possible to infer its implicit inclusion from the particular language utilized in some articles. There are at least four ways that can lead to reading the ecosystem approach into UNCLOS through the essential equivalence route. First, the notion of the interdependence of species (e.g. art. 119 and 61) may be taken to represent the concept of the ecosystem approach at the time.⁹² Secondly, mention of the effects that human activities may have ‘on species associated with or dependent upon harvested species’

marine ecosystem, Wallingford, UK and Cambridge, MA: FAO and CAB International, 2003.

⁸⁸ United Nations Convention on the Law of the Sea, Montego Bay, 10 December 1982, entered into force on 16 November 1994, (1982) 21 International Legal Materials 1261 (UNCLOS), Article 194(5).

⁸⁹ Thus Belsky, 1995, *op. cit.*

⁹⁰ Morishita, 2008, *op. cit.*

⁹¹ Morishita, 2008, *op. cit.*, p. 20.

⁹² *Ibid.*

(art. 194) may also be considered to entail, essentially, an ecosystem approach. Third, article 192, as an integrative norm encompassing all aspects of the marine environment and all maritime zones can also be said to effectively express the key elements of the ecosystem approach. Fourth, and finally, article 192 also opens for the inclusion of more recent principles of international environmental law in UNCLOS,⁹³ including arguably the ecosystem approach itself.

Scholars have made use of all of these options. Belsky for example has made a strong case in this respect already in 1995, when he maintained, in a detailed analysis, that the evolution of the ecosystem approach 'from preferred policy to binding custom' is 'demonstrated' by UNCLOS.⁹⁴ He observed that under UNCLOS all Parties have an obligation to 'preserve and protect the marine environment',⁹⁵ and to 'manage their resources based on the interdependence of species'.⁹⁶ Belsky further suggests that 'specific management principles of [UNCLOS] provide for a *comprehensive ecosystem approach*'.⁹⁷ Even MSY, whose central role in UNCLOS could militate against an ecosystem orientation, Belsky argues, is 'qualified by 'other relevant environmental and economic factors' and [shall] take into account the 'interdependence of stocks'.⁹⁸ In conclusion and recalling that the provisions of UNCLOS must be read as a whole, Belsky claims with confidence that UNCLOS 'mandates the ecosystem approach'.⁹⁹

Others make similar arguments. Aqorau considers UNCLOS to be one of the 'international instruments that specifically 'apply the ecosystems approach to fisheries management'.¹⁰⁰ Morishita refers to the use of formulations such as 'relevant environmental and economic factors' used to qualify the use of MSY (art. 119), 'the interdependence of stocks' (art. 119) and 'the effects on species associated with or dependent upon harvested species' (art. 194).¹⁰¹ Article 119 in particular, contends Morishita, while 'not using the term, represents the concept of the ecosystem approach at the time of the conclusion of the negotiations for UNCLOS'.¹⁰² Others, further, encourage accepting the opinion of those scholars that, while acknowledging that UNCLOS does not explicitly incorporate the ecosystem approach, recognize that the latter 'coincides with the spirit and objectives of UNCLOS'.¹⁰³ Moreover, it is suggested, UNCLOS is supportive of the ecosystem approach (and especially of the more specialized articulation known as ecosystem approach to fisheries)¹⁰⁴ through a multiplicity of provisions, which 'embrace', if only to an extent, some of the attributes of the ecosystem approach.¹⁰⁵

It is thus clear that there are ways to infer an ecosystem orientation, if not a full-fledged ecosystem approach, in UNCLOS. Such inference may be useful for the effective inclusion of the ecosystem approach in the future BBNJ agreement. However, while it is possible to read the ecosys-

⁹³ See e.g. PCA, *Philippines v. China*, para 941.

⁹⁴ Belsky, 1995, op. cit., p. 194.

⁹⁵ Article 192 UNCLOS; Belsky further refers to articles 194, 197, 207, 207, 210.

⁹⁶ Belsky, 1995, op. cit., p. 195; Belsky refers to articles 61, 63, 64, 65, 66, 67.

⁹⁷ *Ibid.*, p. 195, footnote 81, emphasis mine.

⁹⁸ *Ibid.*, p. 195, footnote 81.

⁹⁹ *Ibid.*, p. 196. For a contrary opinion see however W. Burke, 'Compatibility and Protection in the 1995 Straddling Stock Agreement' in H. Scheiber (ed.) *Law of the*

Sea: The Common Heritage and Emerging Challenges, Leiden: Martinus Nijhoff Publishers, 2000, pp. 125–126.

¹⁰⁰ Aqorau, 2003, op. cit.

¹⁰¹ For a fuller discussion see Morishita, 2008, op. cit., p. 20.

¹⁰² *Ibid.*, p. 20.

¹⁰³ Wang, 2010, op. cit. p. 48.

¹⁰⁴ On the ecosystem approach to fisheries see FAO 2003.

¹⁰⁵ *Ibid.*, p. 48. Similarly E. Kirk, 'The Ecosystem Approach and the Search for An Objective and Content for the Concept of Holistic Ocean Governance', *Ocean Development and International Law*, 46:1, 2015, 33, p. 40.

tem approach into UNCLOS through these two methodological pathways, it is also important to underline that the ecosystem approach remains at best implicit in UNCLOS, and at worst entirely alien to it. Moreover, the concept does not offer any systematic or detailed blueprint that the BBNJ agreement may refer to, which in turn means that a simple reference to the ecosystem approach is by no means sufficient if one is to understand what is meant and what legal consequences such inclusion among the guiding principles and/or approaches may have.

3.4. The Ecosystem Approach in the Broader International Legal Context

It is at this point useful to offer a brief overview of other articulations of the ecosystem approach within the context of other relevant international regimes. These on the one hand define the key elements of the ecosystem approach in their different contexts. On the other, they define also the relationship between the ecosystem approach and other conservation tools (such as marine protected areas) that provide the context for the invocation of the ecosystem approach in the BBNJ process, or principles (such as the precautionary principle) mentioned alongside the ecosystem approach as potential guiding principles and/or approaches.

In relation to Oceans, ecosystem approaches (in the plural) became a 'theme' following the WSSD, which encouraged States to apply the ecosystem approach by 2010.¹⁰⁶ UNGA resolution A/RES/60/30 subsequently requested the United Nations Open-ended Informal Consultative Process (ICP) on Oceans and the Law of the Sea to focus one of its sessions (the seventh)

on 'ecosystem approaches and oceans'.¹⁰⁷ ICP-7's report, while recognizing that there was no single way to conceptualize and implement the ecosystem approach, arrived at a set of 'agreed consensual elements'. These included, inter alia, conservation of ecosystem structures and their functioning and key processes in order to maintain ecosystem goods and services; the balancing of diverse social objectives; the use of best available knowledge; participatory governance; precaution; the appropriate balance between, and integration of, conservation and sustainable use of marine biological diversity. The ICP-7 report also includes a second set of elements 'for the improved application of an ecosystem approach', such as, inter alia: identification of ecologically based management areas; assessment of ecosystem health and indicators; adaptive management; ecosystem monitoring; and addressing the 'root causes' of ecosystem degradation.

FAO has also carried out important work in relation to the ecosystem approach to fisheries.¹⁰⁸ However, the question of whether and to which extent fisheries will be included within the scope of the international legally binding instrument (despite the fact that fisheries is perhaps the global legal field where most initiatives are taken to address the protection of marine biodiversity)¹⁰⁹ remains unanswered at this point. For this reason, I will not discuss this further, except to mention one significant point that illustrates two key issues when discussing the ecosystem approach. First, FAO distinguishes between an ecosystem-based management, which it consid-

¹⁰⁶ Report of the World Summit on Sustainable Development Johannesburg, South Africa, 26 August–4 September 2002, para 30(d).

¹⁰⁷ Report on the work of the United Nations Open-ended Informal Consultative Process on Oceans and the Law of the Sea at its seventh meeting, New York, 12–16 June 2006, UNDOC/A/61/156, 2006.

¹⁰⁸ FAO 2003, op. cit.

¹⁰⁹ T. Henriksen, 'Conservation and Sustainable Use of Arctic Marine Biodiversity: Challenges and Opportunities', *Arctic Review on Law and Politics*, 1:2, 2010, 249, p. 262.

ers an important shift in management paradigm, and the ecosystem approach (to fisheries), which it considers by contrast to represent a continuous development from existing management practices.¹¹⁰ Secondly, this also illustrates the potential importance of utilizing precise and deliberate terminology, which is not the case today in the BBNJ interventions which use at least three formulations: ecosystem approach (the most common one), ecosystem-based management (used for example by WWF, as noted) and ecosystem management.¹¹¹

The CBD early on adopted the ecosystem approach as ‘the primary framework of action to be taken under the Convention’¹¹². The CBD however has made clear that the ecosystem approach does not possess a legally binding character, but is rather intended to offer a framework of ‘flexibility and experimentation’ in the implementation of the substantive obligations under the CBD, with a view to achieve the ‘integrated management of land, water and living resources’.¹¹³ The CBD has also endorsed a set of 11 principles known as the Malawi Principles¹¹⁴ that, while subsequently refined and elaborated,¹¹⁵ remain an important reference point for any discussion of the ecosystem approach, as indeed evident also from the CBD’s intervention during IGC-1.¹¹⁶

¹¹⁰ FAO 2003, op. cit., p. 2.

¹¹¹ For a detailed analysis of these terminological and conceptual differences see De Lucia, 2015, op. cit. and De Lucia, 2019a, op. cit.

¹¹² Decision II/8 1995.

¹¹³ Decision V/6 2000.

¹¹⁴ Ibid. The Principles also include four operational guidelines.

¹¹⁵ Decision VII/11, ‘Ecosystem Approach’, 9–20 February 2004, Kuala Lumpur, Malaysia, UNEP/CBD/COP/DEC/VII/11.

¹¹⁶ Statement by the Secretariat of the Convention on Biological Diversity, 5 September 2018, <http://papersmart.unmeetings.org/media2/19408163/scbd-statement-general-exchange-delivered-5-sept-morning-.pdf> accessed 26 November 2018.

The OSPAR Convention on the protection of the marine environment of the North-East Atlantic¹¹⁷ also offers an important reference point, particularly its Annex V, relating to the protection of biodiversity. The ecosystem approach is an important tool within OSPAR, which has also pioneered work on the development of ecological quality objectives which serve as important tools for the actual monitoring of ecosystems and for the implementation of the ecosystem approach.¹¹⁸

These elements all represent important reference points in relation to the articulation of the ecosystem approach within an international legally binding agreement. However, as I have shown at length elsewhere, they do not speak of the same ecosystem approach.¹¹⁹ The question then, is how the ecosystem approach should be considered, included and articulated in a future BBNJ agreement so as to make a difference.

4. Integrating the Ecosystem Approach in the BBNJ Agreement. Risks and Opportunities

In light of these complexities, how should we regard and understand the very limited inclusion of the ecosystem approach in the BBNJ process? What *should be* the role of the ecosystem approach in the new BBNJ agreement? Is the inclusion of the ecosystem approach merely a rhetorical gesture, destined to populate the preambular and/or non-operative sections of the ILBI? If the intention by converse is the effective operationalization of the concept, are the current mentions sufficient for that purpose? How

¹¹⁷ Convention For The Protection Of The Marine Environment Of The North-East Atlantic (OSPAR Convention), 32 ILM 1069, (1993).

¹¹⁸ OSPAR Commission, The OSPAR System of Ecological Quality Objectives for the North Sea. Towards Assessing Ecosystem Health, Update 2010.

¹¹⁹ De Lucia 2015, op. cit.; De Lucia 2019a, op. cit.

should the ecosystem approach be articulated to ensure it plays a significant and effective role for marine biodiversity governance of areas beyond national jurisdiction? Even if the ecosystem approach is already part of UNCLOS, by way of one of those interpretative methods outlined in the previous section, what does this consideration add? How does that help define the relevant elements and the operational aspects of the ecosystem approach in the future ILBI?

A mere mention will possibly only defer the 'negotiation' over its implications as one of the guiding principles and/or approaches in a future agreement (including the distinction between principle and approach, which echoes the long struggle over the concept of precaution).¹²⁰ Thus, simple reference would not make much difference and may become a lost opportunity. However, even if a definition is included the ILBI, will it be sufficient? Given the multiplicity of possible articulations and orientations, definitions are likely to remain vague, over-inclusive and generally rather susceptible of contrasting emphases and interpretations, particularly in relation to their operationalization. Moreover, all definitions, as a classic Roman brocard warns, are easily subverted.¹²¹

From a substantive perspective, some elements of an ecosystem approach are being negotiated, and will be included at least to some

degree, under the different negotiating items (e.g. EIAs, as mentioned in section 2.3). However, the question remains as to whether this will be sufficient to give the ILBI a coherent ecosystem orientation, and indeed, it seems unlikely.¹²²

One interesting way to effectively include the ecosystem approach in a future ILBI is outlined by the WWF submission reviewed in section 2.2, whose key suggestion is to adopt an Annex to the agreement where to set extensive operational rules and parameters. One such Annex, it can be added, could also include a clear reference to one of the existing frameworks setting out the key elements of the ecosystem approach to reduce ambiguities. The Malawi Principles come to mind, given their biodiversity focus. However, perhaps more relevant in an ocean governance context are the ICP-7's report and the work done within the context of OSPAR and FAO. This is not the place to review these elements in details and it is sufficient to emphasize how such a list of elements would help concretize the particular articulation of the ecosystem approach the ILBI will adopt and would also focus the discussion on more specific operational rules. For example, a definition of ecological integrity, maybe along the lines of the CCAMLR could prove very useful. CCAMLR to be sure, does not define ecological integrity explicitly. However, the meaning of the concept can be evinced from one of CCAMLR's objectives, namely the 'prevention of changes or minimization of the risk of changes in

¹²⁰ See e.g. J. Peel, 'Precaution – a Matter of Principle, Approach or Process?', *Melbourne Journal of International Law*, 5, 2004. This debate is still alive also in the IGC, as evident by the many submissions in this regard during IGC-3, suggesting to replace precautionary principle with precautionary approach, see Conference Room Papers (CRPs) A/CONF.232/2019/ABMT/CRP.7 (Canada, Turkey and New Zealand), A/CONF.232/2019/ABMT/CRP.6 (Core Latin American Countries) and A/CONF.232/2019/ABMT/CRP.5 (PSIDS) and A/CONF.232/2019/ABMT/CRP.1 (USA).

¹²¹ D. 50.17.202 (Iav. l. 11 epist.), Iavolenus – sourced from E. Bianchi, 'Realtà, miti, finzioni in Santi Romano. Osservazioni 'frammentarie' di un romanista' 3 JusOnline 2017.

¹²² This also links to the vexed question of the relation between the ILBI and existing global, regional and sectoral bodies and institutions, and the vexed question of the meaning of "not undermining", see V. De Lucia, 'Rethinking the Conservation of Marine Biodiversity beyond National Jurisdiction – From 'Not Undermine' to Ecosystem-Based Governance', 8:4 ESIL Reflection 2019b, <https://esil-sedi.eu/esil-reflection-rethinking-the-conservation-of-marine-biodiversity-beyond-national-jurisdiction-from-not-undermine-to-ecosystem-based-governance/>.

the marine ecosystem which are not potentially reversible over two or three decades'.¹²³ However, since the devil is in the detail, and considering how the ecosystem approach can and does take many forms, regardless of the level of detail that the relevant operational guidance contains, the key will be the actual rules adopted to ensure its effective implementation, including for example whether there will be any reference to ecological quality objectives or other concrete, measurable thresholds and conditions.

There are also some points related to integration that bear mentioning, as they are arguably critical and should be addressed explicitly in a future agreement. An important consideration in this respect is the unit of management. If the unit of managements are geographical and ecological areas, then the ecosystem approach poses important challenges that should be addressed openly, in a way that mirrors the concerns over adjacency coastal States have raised during the PREPCOM and IGC so far.¹²⁴ Furthermore, the ecosystem approach is already in principle operational in domestic marine spaces. It is also operational within the context of many international institutional and legal regimes and is an important policy instrument in international fisheries law. It is included in most regional fisheries management organizations (RFMOs), and is arguably also included, in different ways, in UNCLOS – albeit tentatively and by way of interpretation, as we have seen – in the FSA¹²⁵ and in the Code of Conduct for Responsible Fisheries.¹²⁶ In this respect, an important question will be how all these institutions will coordinate their efforts in order to ensure the coordination and compatibil-

ity of measures that operationalize the ecosystem approach in the particular geo-ecological areas of relevance, rather than within particular jurisdictional boundaries or areas of competence. Some experience of inter-institutional coordination exists,¹²⁷ but the ILBI may offer a new opportunity for rethinking in a more ambitious manner the role of the ecosystem approach for the conservation of marine biological diversity in all maritime zones.¹²⁸

In this respect, while adjacency is high on the agenda of coastal States, compatibility should also be explicitly articulated with respect to the ecosystem approach in order to ensure that measures taken in areas within national jurisdiction do not undermine those taken in areas beyond national jurisdiction in those cases where a target ecosystem straddles jurisdictional lines, both horizontally and vertically.¹²⁹ The principle of compatibility, enshrined in article 7 of the Fish Stocks Agreement, has been already introduced in the BBNJ process as regards the issue of ABMTs, and the PREPCOM report, under the heading 'Relationship to measures under relevant instruments, frameworks and bodies', mentions that a future treaty text 'would address the re-

¹²⁷ E.g. Memorandum of Understanding between the North East Atlantic Fisheries Commission (NEAFC) and the OSPAR Commission, https://www.ospar.org/site/assets/files/1357/mou_neafc_ospar.pdf, accessed 2 December 2018. Another useful reference, or even model, is the Collective Arrangement entered into also by OSPAR and NEAFC, but aiming at engaging all relevant instruments and bodies competent to take measures within the North East Atlantic. For some further reflections on this see De Lucia 2019b.

¹²⁸ See on this De Lucia, 2019b, *op. cit.*

¹²⁹ Such is the case of the Arctic Large Marine Ecosystem identified by PAME, whose area includes the EEZ of four coastal States as well as the high seas, PAME, 'Large Marine Ecosystems (LMEs) of the Arctic Area. Revision of the Arctic LME Map', 15th of May 2013, Second Edition, PAME-led Group of Experts on the Ecosystem Approach to Management, http://www.pame.is/images/03_Projects/EA/LMEs/LME_revised.pdf, accessed 26 November 2018.

¹²³ CCAMLR, art. II(3)(b).

¹²⁴ A. Oude Elferink, 'Coastal States and MPAs in ABNJ: Ensuring Consistency with the LOSC', 33:3 *The International Journal of Marine and Coastal Law*, 2018, 437.

¹²⁵ Metzger 2009, *op. cit.*

¹²⁶ FAO 2003, *op. cit.*

relationship between measures under the instrument and those established by adjacent coastal States, including issues of compatibility'.¹³⁰ Here in principle we might have a complex interaction between the future BBNJ body, a regional seas or regional fisheries organization, a coastal state and the International Seabed Authority all involved in establishing compatible measures under the guidance of the ecosystem approach obligations adopted in a BBNJ treaty. Indeed, compatibility is crucial to 'not undermine the effectiveness of [...] measures' taken in other maritime zones.¹³¹ But is compatibility enough? This may be an opportunity for rethinking the multiple boundaries of governance that an ecosystem approach would force to confront. And this is not a question of re-writing the principles, rules, rights and obligations of UNCLOS, but of rendering effective existing ones, such as article 192, through their implementation in relation to marine biodiversity *across* sectors (including, importantly, fisheries) and jurisdictional lines, precisely in the way that the ecosystem approach ought to be operationalized. The key to this is the institutional architecture that will come out of the negotiations, as that will establish the rules and mechanisms for the coordination and interaction among existing relevant bodies, instruments, frameworks and mechanisms, whether regional, sectoral or global. If the goal is the maintenance of the ecological integrity of marine ecosystems in ABNJ, then these questions must be raised and addressed head on.

Another important aspect connects with the element of knowledge. For the ecosystem approach to be made operational there is a fundamental requirement of having a sufficiently robust scientific basis for understanding and then protecting and finally monitoring, relevant

ecosystems. It is the opinion of the present writer that this aspect has been so far much neglected during the PREPCOM and still during the IGC so far. Ecosystem Monitoring Programs (like e.g. CCAMLR) are however crucial for enabling an ecosystem approach. WWF's submission in this respect also offers useful pointers, but that is hardly enough if the question is not addressed explicitly in the negotiations.

Finally, a robust articulation of the ecosystem approach in the ILBI would also include specific procedural rules to ensure that the iterative requirements of an adaptive management are addressed.

5. Conclusions

The ecosystem approach has recently become the preferred framework for addressing holistically the multiscale and complex impacts to biodiversity and ecosystems in a variety of international legal and policy regimes. The ongoing BBNJ process has also identified it as one of the potential guiding principles and/or approaches of a future ILBI. However, it remains unclear what role the ecosystem approach will in fact have and the modality of its inclusion. To date, all evidence points to the fact that the ecosystem approach will be mentioned alongside other potential guiding principles and/or approaches without any further delineation of its substantive and operational aspects.¹³² This is likely to leave the question of its legal implications unresolved, especially considering that the ecosystem approach remains ambiguous, is affected by significant conceptual complexities, and has devel-

¹³⁰ PREPCOM report, para 4.2.

¹³¹ Art. 7(2)(a9) FSA.

¹³² However, draft article 5 of the recently circulated President Draft Treaty text that shall form the basis of IGC-3 negotiations does not include the ecosystem approach, but only a vague "integrated approach", which may or may not be understood as somewhat equivalent to an ecosystem approach, considering the importance of the notion of integration for the latter, as discussed in section, A/CONF.232/2019/6, p. 7.

oped in significantly different ways in different contexts. In this respect, the main risk is that the ecosystem approach will remain a mere mention without any effective mechanisms for its implementation. By converse, the main opportunity is to open substantive discussion on its meaning, key elements and operational ground rules to integrate the work done in different contexts (CBD, UNCLOS, FSA, FAO, OPSAR etc.) and elaborate sufficiently precise provisions in a future ILBI. Considering that it is very likely that any version of the agreement will include hybrid institutional arrangements, with competences distributed between existing regional and future global bodies and institutions, this will also be crucial for ensuring coordination and compatibility between

measures, especially with the view of making it possible to delineate the necessary criteria for regional measures to contribute to compliance under the ILBI. WWF's suggestion of including a detailed formulation in an Annex to the agreement has two crucial advantages: it would allow to keep the negotiations on the main treaty text and on the Annex separate, and possibly also on different temporal trajectories; and would allow a leaner modification procedure, on the model of article 48(2) of the FSA. In this respect, the FSA Annex on precaution may be a helpful model. Regardless of the modality of the inclusion of the ecosystem approach in a future ILBI however, the BBNJ negotiation represents an opportunity that should be seized.

