



Taking a Risk Management Approach to Strategic Environmental Assessment and Environmental Impact Assessment for BBNJ

As the best practical way to give effect to the commitment in UNGA Resolution 69/292 to include ‘environmental impact assessments’ as one of the issues to be included in an international legally binding instrument under the United Nations Convention on the Law of the Sea (UNCLOS) on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction (BBNJ).

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Introduction

As ocean space becomes more crowded and ocean resources are more intensively and widely exploited, the Preparatory Committee provides a timely opportunity to consider how best to roll out environmental assessment processes in areas beyond national jurisdiction (ABNJ) regarding impacts both within and between sectors, including the consideration of cumulative impacts associated with issues such as land-based sources of pollution, ocean acidification and warming linked with climate change.

There is already a considerable body of experience in the development and conduct of Strategic Environmental Assessments (SEA) and Environmental Impact Assessments (EIA) with plenty of examples of institutional and procedural arrangements at the national and sectoral levels (see High Seas Alliance submitted paper for PrepCom2, ‘Key Components and Best Practices for EIA’¹).

SEA is a core component of strategic assessments that may take place across a whole sector (e.g., at the scale of an entire mineral province) or across a whole terrestrial or marine sub-region (e.g., at the scale of catchments or large marine ecosystems) while EIA is customarily applied to a single development, project, initiative or action.

The critical linkage between the two is that collective investment in SEA makes it much quicker and easier to conduct individual EIA, because much of the work has already been done. In particular, threat assessments ensure prior identification of risks and potentially acceptable impact thresholds which allows for risk management strategies to already be in place, providing enhanced levels of

¹ http://www.un.org/depts/los/biodiversity/prepcom_files/NRDC_HSA_EIA_Brief_PrepCom2.pdf

certainty for operators. SEA also provides the appropriate framework for spatial planning including the application of area-based management tools (ABMT) to give effect to plans.

There is no need to reinvent the wheel. We can explore opportunities to adapt appropriate examples to the BBNJ context where, currently, independent sectoral management bodies operate independently without cross-sectoral coordination or oversight arrangements at appropriate regional scales. From this wealth of experience, WWF would like to draw particular attention to three aspects:

- (i) the use of Environmental Risk Assessment as the fundamental approach to both deciding whether activities should proceed and setting conditions on which they may proceed;
- (ii) the use of Environmental Management Plans (EMPs), at both strategic and operational levels, to focus decision-making; and
- (iii) the need for enhanced cooperation to support Integrated Ocean Management (IOM) within which inter-sectoral oversight within ABNJ can be achieved (see WWF's submission On Enhanced cooperation and Effective Dispute Resolution to the Chair for PrepCom¹²).

Principles of the proposed SEA/EIA approach

There should be high levels of precautionary management and impact mitigation to deal with uncertainty, reflecting that, in the ABNJ context, levels of knowledge and understanding are often lower than for terrestrial and coastal ecosystems.

There should be a framework of conservation and sustainable use objectives on which to base targets to act as triggers for decision-making, especially regarding thresholds for levels of impact at appropriate scales from ocean basins, through large marine ecosystems and bioregions to local fine-scale granularity. Data sets at different temporal and spatial scales should be developed and maintained to support such decision-making, including triggers to suspend or abandon activities if threshold levels of serious harm are reached.

SEAs should be comprehensively broad so that the full range of potential threats, including plans, policies and programmes as well as activities, can be identified and associated impacts, including their synergies and interactions, identified and mitigated. In this way, all individual activities can be effectively subject to EIAs by ensuring they are subject to the appropriate level of assessment. While, at the other end of the scale, consideration can be given to ocean acidification and other climate change effects and their interactions with or threats to proposed activities within the context of a given ecosystem or bioregion. Furthermore, assessments should include both the water column and benthic environments and the interactions and connectivity between them, especially in terms of ecosystem function.

It is important to appreciate that different trigger levels regarding the likelihood of serious harm or significant adverse impacts/change may be warranted in different situations. A common situation which arises in the preparation of environmental impact statements is where substantial evidence may be collected but remains insufficient to support conclusions necessary to allow proposals to

² http://www.un.org/depts/los/biodiversity/prepcom_files/WWF_BBNJ_Prep_Com_1_2016.pdf

proceed. Poor information bases should result in delays to project assessment while critical information gaps are filled.

Discussion

In national situations, in both marine and terrestrial contexts, EIAs are often conducted without prior SEA such that individual developments risk being presented as ‘faites accomplies’ – the absence of a procedural opportunity to consider whether or not a development should proceed can lead to unnecessary use conflicts and individual project proposals that are not as transparent as required under international law.³ The commitment to negotiate an implementing agreement to UNCLOS on marine biodiversity beyond national jurisdiction (BBNJ) provides a historic opportunity to develop a new comprehensive impact assessment regime that builds on past national experiences and avoids past mistakes while adapting to the peculiarities of managing activities in ABNJ.

States have committed to taking a holistic approach to overcome current fragmentation of governance and management of activities in ABNJ. To achieve this goal, a comprehensive framework for conducting SEAs/EIAs needs to be a core element of such an approach. New institutions are needed at the appropriate regional scale to conduct, enable and oversee assessments that can: identify threats from all sources; ensure cross-sectoral coordination; deal with cumulative impacts both within and across sectors; and exploit opportunities to capture synergies and efficiencies; build and maintain sources of information and expertise available to all. In this way, effective oversight of use of ocean space and resources can ensure that different ecosystems are not stressed beyond their particular capacities to cope.

SEAs can provide and subsequently inform the holistic framework that can ensure the proper identification and assessment of potential impacts of planned policies and programmes as well as specific individual activities in ABNJ to inform subsequent governance and management interventions. Such a **proposed hierarchical holistic, interlinked and iterative framework** would include:

1. The establishment of regional coordination and oversight bodies, as subsidiary bodies of a global conference of the parties (COP), with appropriate mandates and with membership open to all states with an interest in BBNJ of that region (and open to observers from relevant inter-governmental and non-governmental organisations). Their mandates would include responsibility for conducting, enabling and overseeing SEA arrangements tailored to relevant circumstances.
2. The use of regional environmental assessments (REAs) to allow multi-disciplinary broad-brush threat assessment, engaging all relevant stakeholders, at appropriate scales to allow both comprehensive identification of threats and formulation of appropriate responses.

³ E.g. UNCLOS, Art. 206, Rio Declaration on Environment and Development, Principles 10 and 19; See also *Pulp Mills on the River Uruguay (Argentina vs. Uruguay)* Judgment, I.C.J. Reports 2010. At <http://www.icj-cij.org/docket/index.php?p1=3&p2=3&case=135&p3=4>; *South China Sea Arbitration (The Republic of the Philippines vs The People's Republic of China)* Award, PCA Case No 2013-19. At <http://www.pcacases.com/pcadocs/PH-CN%20-%2020160712%20-%20Award.pdf> Paras. 987-991.

3. Transboundary EIAs (TEIAs) are needed to deal with the extraordinary fluidity of marine ecosystems, especially if compared to terrestrial ones – effective management of BBNJ not only involves management of a complex set of relationships between sectoral bodies with ABNJ competencies but also relationships with myriad coastal states with competencies over their respective exclusive economic zone (EEZs) and, in cases, extended continental shelf.
4. The conduct of high resolution risk assessments that would bring all these threat and response considerations together in realistic cumulative effects and risk mapping exercises using a variety of methods⁴ to inform appropriate management measures would then follow. Furthermore, quantitative spatial planning tools can overlay areas important for biodiversity, such as ecologically or biologically significant marine areas (EBSAs) and particular EBSA features⁵, vulnerable marine ecosystems (VMEs), Important Bird Areas (IBAs), Important Marine Mammal Areas (IMMAs), among others. This material then feeds into larger-scale, strategic environmental management plans which can bring together information on cumulative impacts of activities both within and across sectors at appropriate regional scales, while also considering interactions with other factors such as ocean acidification and warming linked to climate change.
5. All accumulated strategic level work then provides an information base for conducting individual project-specific EIAs that result in development of specific EMPs that set conditions within which activities may proceed.

In each one of these phases, applicable general principles of international law, such as those reflected in the Rio Declaration on Environment and Development, would guide deliberations. Appropriate application of the precautionary principle is an important example, given the variable and often limited availability of scientific information in ABNJ.

Importantly, this iterative approach from the strategic regional and sectoral levels to the specific developments and activities provides a feedback mechanism to allow science-based, pragmatic and transparent decision-making that covers not only whether an activity should take place but also setting conditions that reflect varying risk probabilities for threats with varying potential impacts to ensure effective protection, particularly in sensitive areas – e.g. in EBSAs, VMEs, IBAs, IMMAs, etc.

A key consideration in this regard, is the use of adaptive environmental management to allow risk and threat assessments and responses to be modified on the basis of operational experience. This is

⁴ See Halpern, Benjamin S., Shaun Walbridge, Kimberly A. Selkoe, Carrie V. Kappel, Fiorenza Micheli, Caterina D'Agrosa, John F. Bruno et al. "A global map of human impact on marine ecosystems." *Science* 319, no. 5865 (2008): 948-952; For quantitative spatial patterns of human uses methodology on cumulative effects, see also Halpern, Benjamin S., Carrie V. Kappel, Kimberly A. Selkoe, Fiorenza Micheli, Colin M. Ebert, Caitlin Kontgis, Caitlin M. Crain, Rebecca G. Martone, Christine Shearer, and Sarah J. Teck. "Mapping cumulative human impacts to California Current marine ecosystems." *Conservation letters* 2, no. 3 (2009): 138-148.

⁵ It is important to note that areas that meet the EBSA criteria are not necessarily homogenous. In other words, one EBSA can contain a number of biological and ecological features that merited its description by meeting individual criterion. Therefore, in a finer scale, disaggregate spatial data for each area found to meet the EBSA criteria would add value to any threat/risk assessment exercise.

a critical component of the iterative process that allows efficiencies to be captured by evolving better ways of doing things.

Finally, no SEA/EIA process is complete without an effective review component. Key elements being regularity, independence, and notice and consultation, including public consultation (see Rio Declaration Principles 10 & 19). Adaptive management then allows the outcomes of such reviews to be incorporated into modifications to all stages of the SEA/EIA process, including operational EMPs. This is a key pathway whereby new data and new scientific understanding can be incorporated into deliberations and the decision-making process.

In the context of this iterative approach, EIAs can be used as a procedural tool for undertaking more fine scale and detailed risk assessments when and where deemed appropriate. For instance, EBSAs often contain multiple biological features unevenly spread within their limits, which need 'unpacking' at fine scale. This helps with risk management – an assessment 'tool', used in the broader oceans context, that helps establish the 'why, when and how' for using management and operational 'tools' efficiently and effectively.

To be effective and comprehensive, various stages in the EIA/SEA process need to be correctly placed in the overall institutional and procedural framework. Key questions include: what needs to be determined globally or regionally (e.g., standards and guidelines, data management), what needs to be controlled sectorally or cross-sectorally (e.g., conduct of assessments and formulation of conditions), where are the boundaries of regional coordination and sectoral control (e.g., who sets regulations and who's responsible for compliance and enforcement).

One of the key reasons why WWF believes that regional subsidiary bodies should be established under the new implementing agreement to UNCLOS, is to oversee the establishment of inevitably complex relationships, not only between sectoral bodies with competencies in ABNJ, but also with and between coastal states in respect of their EEZs and extended continental shelves in accordance with international law, including UNCLOS. Reflecting marine ecosystems' lack of respect for jurisdictional boundaries, TEIAs constitute an obligation under international law,⁶ and are necessary to ensure that assessment processes are sufficiently comprehensive and management responses are effective. Management of plumes from minerals activity is a good example – potentially impacting across both boundaries and uses.

Suggested Institutional and Procedural Mechanisms:

- EIAs need to be conducted pursuant to global standards adopted by a COP pursuant to the proposed new UNCLOS implementing agreement. These standards would include commitments to implement not only relevant provisions of all applicable international law but also decisions of relevant international bodies. Regional guidelines to give effect to these global principles would be maintained and kept up to date by regional oversight bodies established as subsidiary bodies of the agreement's COP, acting in cooperation with

⁶ See *Pulp Mills Case* supra note 3; See also International Law Commission, 'Draft Articles on Responsibility of States for internationally wrongful acts', in *Report of the International Law Commission, Fifty-Third Session*, UN GAOR, 56th Sess., Supplement no. 10, UN Doc. a/56/10, 42 (2001), Art 48.

competent sectoral bodies and relevant coastal states. A key consideration would be choice of level of assessment based on consideration of how threats and cross-sectoral and cumulative impacts, within and between sectors, within and beyond national jurisdiction, are to be identified, assessed and managed.

- SEAs need to be rolled out globally at the regional level by regional oversight bodies – at the appropriate scale at which such strategic assessments are best done. Global standards, guidelines and procedures would ensure coherence and appropriate involvement of interested states and competent bodies, including regional seas organisations and other relevant international bodies. They would also ensure effective operationalisation of integrated ocean management (IOM) and ecosystem-based management (EBM).
- SEAs, including regional environmental assessments and transboundary EIAs, and resultant Strategic or Regional EMPs would provide strong efficiencies for subsequent EIAs and finer scale EMPs. This is because big questions have already been identified and identified threats are already under management allowing operators to know what to expect in terms of likely conditions and expected performance outcomes (e.g., underwater noise restrictions where SEAs could establish standing arrangements that would obviate the need for noise to be evaluated anew by each EIA, likewise, MPA networks can be established in advance.
- SEAs also drive research and monitoring – filling gaps in information and understanding, strengthening baseline studies, driving a research agenda, improving data flows to support monitoring, supporting data set management, etc..
- SEAs can also be used to evaluate broader issues, especially likely and reported impacts of climate change, including ocean acidification, current perturbation, sea surface warming, species/ecosystem shifts, etc.
- The approach for both EIAs and SEAs needs to ensure that: (i) adjacent and associated coastal state EEZ waters are properly included through transboundary EIAs; and (ii) interests and decisions of other intergovernmental bodies (e.g., CITES, CMS listings, CBD decisions, etc.) are recognised and such bodies are properly engaged and involved.
- And, last but not least, whatever processes and institutional arrangements are created need to provide for land-based sources of pollution to be considered and addressed. In other words, competent bodies have a responsibility for conserving and sustainably using BBNJ and anything that poses a threat to that is relevant, even if it does not comprise an in situ ocean use. Those states involved would need to identify and engage other relevant states, including relevant bodies and processes, with a view to assisting in the development and implementation of threat reduction and impact mitigation strategies.

There are a variety of assessments that need to be conducted at the appropriate institutional level and geographic scale:

- Within sector **EIA for a single user** (e.g., by a fishing vessel (FV) or owner/flag state fleet of FVs) – this reflects a ‘simple’ use of EIAs, with guideline-driven EIS documentation and evaluation by the relevant sectoral regulatory body, followed by detailed condition setting (with prior arrangements for mitigation including alternative plans and no-go situations).
- **Single sector SEA** (e.g., of an International Seabed Authority (ISA) mineral province assessment, ahead of opening it up for exploration where, for instance, marine protected area (MPA) networks would be established ahead of licence applications; or RFMO assessment of a tuna fishery that might include total allowable catch (TAC) setting and capacity/allocation considerations) – creating a strategic framework within which individual EIAs can be simplified.
- **Cross sectoral SEA** (e.g., avoiding use conflicts between miners or shippers and fishers as well as between fishers and cable-layers) – establishing the need for a regional institutional body capable of delivering such a commitment. It would: set guidelines; oversee and/or conduct assessments; ensure adequate management responses; maintain access to data, information and expertise; etc..
- **Regional, area-based environmental assessment and management oversight** (where SEA is a key part of the planning process and risk-assessment identifies cross-sectoral and land-based threats – an assessment process that can be converted into congenial co-management not only by competent sectoral bodies (e.g., through appropriate MOUs) but also relevant coastal states (through complementary management). Sectoral operational constraints, area separation and other management arrangements would be subject to coherent and comprehensive regional oversight by bodies open to all interested states.

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