

## Value proposition for Integrated Ocean Management

(Integrated Ocean Management Update 5)

Current sector-based management in a crowded ocean is insufficient to deliver on societal expectations of effective management and is costly in terms of time and money. IOM offers the opportunity for harmonization across jurisdictions and sectors, and of better management outcomes compared with sector-based planning alone. The long-term benefits of optimisation, consistency of approach and improved outcomes should outweigh short- term challenges of implementation.

Integrated Ocean Management (IOM) is necessary to achieve the full value of marine activities and to overcome major deficiencies of current sector-based management while meeting a high standard of ecological objectives including for biodiversity.

The deficiencies of current management are costly in terms of performance, time and money. Inconsistency in approaches to different managed activities undermines the credibility of management. Siloed approaches impede development of infrastructure such as that needed for energy transformation. Competition for space, *ad hoc* overlap among activities and lack of attention to cumulative impact leads to reduced performance against objectives. Insufficient sharing of data leads to apparent data gaps and duplication of costly surveys.

The value proposition for integration of management through IOM includes the following:

- Cooperation and harmonization among jurisdictions and sectors (e.g. NSW <u>Marine Estate Management)</u>
- Optimization of space and synergy among activities due to increased collaboration and planning (e.g.
   Development of an integrated multi-trophic aquaculture (IMTA) system for tropical marine species,

   Fishing within offshore wind farms in the North Sea)
- Consistency in approach leading to reduced conflict and greater credibility of management (<u>Key</u> principles for effective marine governance in the Great Barrier Reef)
- Achievement of diverse ecological, economic, social/cultural and governance objectives leading to greater sustainability (as identified in Fisheries <u>Healthcheck</u>, <u>Integrating diverse objectives for</u> sustainable fisheries in Canada)
- Coordinated action on important issues such as climate change adaptation (<u>Climate Adaptation Handbook</u>), Indigenous reconciliation (e.g. <u>Historic agreement for cultural and commercial abalone fishing</u>) and critical ecosystem restoration (<u>Tasmanian Giant Kelp Restoration</u>)
- Improved consideration of trade-offs and cumulative performance of activities in an area against societal priorities leading to regional prosperity (e.g. <u>Gladstone Harbour Report Card Framework</u>)
- Strategic opportunity to increase investment in ocean economy, infrastructure development and sustainable activities (e.g. <u>Victoria's Marine and Coastal Management Plan</u>; <u>Spencer Gulf Ecosystem and Development Initiative (SGEDI)</u>)
- Cost-effective compilation of the appropriate data for improved knowledge of the ocean. Improved use
  of traditional and scientific knowledge across region (e.g. <u>State of the Environment Report</u>,
  <u>Empowering her guardians to nurture our Ocean's future</u>).

IOM offers a 'whole of governance approach' to management. It provides a common framework to support sector-based management as well as more holistic spatial planning, ecosystem-based management and development of a sustainable Blue Economy.

Implementation of IOM is not without 'risk' in the short term. Implementation will require sufficient resourcing, there may be powerful interests who resist change to existing sector-based approaches, and political support is important. However, we suggest the short-term costs are offset by the potential long-term benefits summarized above. Risks and short-term costs can be reduced by attention to stages of implementation (Stephenson and Hobday 2024). In the long run, we suggest IM will not cost more, and will not take more time - We 'can't afford not to' implement IM.

The full value of IOM can be achieved with an 'objective-based' or 'outcome-based' management approach, applied to all activities in an area and enabled by an arrangement that facilitates governance integration (Fig 1; See also Stephenson and Hobday 2024).

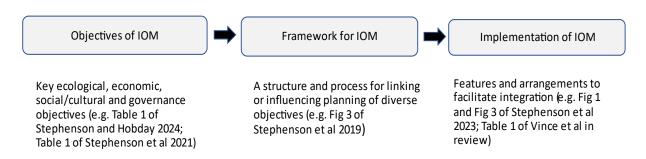


Figure 1. Schematic summary of the implementation of IOM.

The objectives of IOM emerge from diverse sources including Sustainable Ocean Plan priorities, literature on full spectrum sustainability, and Sustainable Development Goals. They include core ecological, economic, social/cultural and governance objectives or values that reflect domestic policies and international agreements. This is all consistent with legislation and international commitments including the High Level Panel for the Oceans.

The general, practical framework of IOM is also clear, as an arrangement that links and enhances existing planning and management. Identification of common objectives allows considerations of trade-offs and cumulative performance of management and harmonization of existing (legacy) arrangements, which may have deep roots.

The major challenge initiating IOM seems to be development of an arrangement that facilitates integration in a 'whole of governance' approach. We have previously identified key features and anticipated phases of IOM and continue to study integrative capacity (e.g. <u>Governing during an ocean climate crisis</u>: <u>Building integrative capacity</u>). Others have focused on governance principles and means of implementing governance arrangements. Much of the discussion around implementation of IOM reflects hesitation about the form or structure it should take, and 'how to get on with it'. We suggest that IM could be implemented successfully in diverse arrangements, both formal or informal (see <u>Stephenson et al 2023</u>). We also suggest that the value proposition, summarized above should be compelling for IOM implementation.

## Further reading

- 1. Stephenson & Hobday (2024) Blueprint for Blue Economy Implementation. Marine Policy. https://doi.org/10.1016/j.marpol.2024.106129
- Stephenson et al (2021) The quilt of sustainable ocean governance: Patterns for practitioners. <u>Frontiers in Marine Science</u> https://doi.org/10.3389/fmars.2021.630547
- Stephenson et al (2023) Integrating management of marine activities in Australia. <u>Ocean & Coastal Management</u>. https://doi.org/10.1016/j.ocecoaman.2022.106465
- Stephenson et al (2019) A practical framework for implementing and evaluating integrated management of marine activities. <u>Ocean and Coastal Management</u>. <a href="https://doi.org/10.1016/j.ocecoaman.2019.04.008">https://doi.org/10.1016/j.ocecoaman.2019.04.008</a>

## Contacts

Alistair Hobday, CSIRO Environment – <u>Alistair.Hobday@csiro.au</u>
Robert Stephenson, DFO and University of New Brunswick – <u>rls@unb.ca</u>