Ocean Accounts as Infrastructure for the BBNJ Clearing-House Mechanism

Integrating Environmental, Economic, and Social Data for Evidence-Based Ocean Governance

Ben Milligan | Centre for Sustainable Development Reform | University of New South Wales | Technical Paper • 2025 | Working Draft Not for Citation

Summary

The 2023 Agreement on Biodiversity Beyond National Jurisdiction (BBNJ) establishes a Clearing-House Mechanism (CHM) as its digital backbone for transparency, compliance, and benefit-sharing across all treaty functions. Yet the Agreement provides limited technical specifications for CHM implementation, creating risks of

fragmented development and missed opportunities for systematic ocean governance.

Ocean Accounts—a structured framework for integrating environmental, economic, and social ocean data aligned with international statistical standards—offers a proven architecture that can operationalize CHM requirements while enabling evidence-based decision-making for sustainable ocean development.

This research demonstrates that Ocean Accounts provides essential infrastructure for CHM success through five key synergies: standardized spatial data architecture enabling consistent geographic reporting; flow accounting systems that can track marine genetic resource utilization chains; baseline condition accounts supporting robust environmental impact assessments; asset monitoring frameworks measuring conservation effectiveness; and standardized indicators facilitating capacity-building and technology transfer.

Download Full Research Paper (PDF)

Key Findings

Spatial Architecture

Ocean Accounts' Basic Spatial Unit framework provides three-dimensional geographic reference system essential for consistent BBNJ reporting across all treaty pillars.

Resource Tracking

Flow accounting systems enable comprehensive tracking of marine genetic resource utilization chains from extraction through commercialization for equitable benefit-sharing.

Impact Assessment

Environmental asset accounts establish robust baselines supporting comprehensive environmental impact assessments and area-based management effectiveness monitoring.

Capacity Building

Standardized indicators and modular implementation enable all countries to participate regardless of technical capacity while building toward comprehensive systems.

Implementation Pathway

The integration follows a phased approach leveraging proven experience from the Global Ocean Accounts Partnership's work with 30+ countries:

1. **Foundation Phase** (Pre-COP1): Establish technical working groups and pilot projects
2. **Early Implementation** (COP1–COP3): Deploy core CHM architecture with pilot country integration
3. **Expansion Phase** (COP3–COP5): Scale to global coverage with automated data flows
4. **Full Operation** (Post-COP5): Achieve universal participation with predictive analytics

This approach builds on existing environmental-economic accounting systems rather than creating parallel structures, reducing costs while accelerating implementation through regional cooperation and traditional knowledge integration.

Access the Full Research Paper: Navigate to the **Research Paper** section for the complete analysis, technical specifications, and detailed recommendations.