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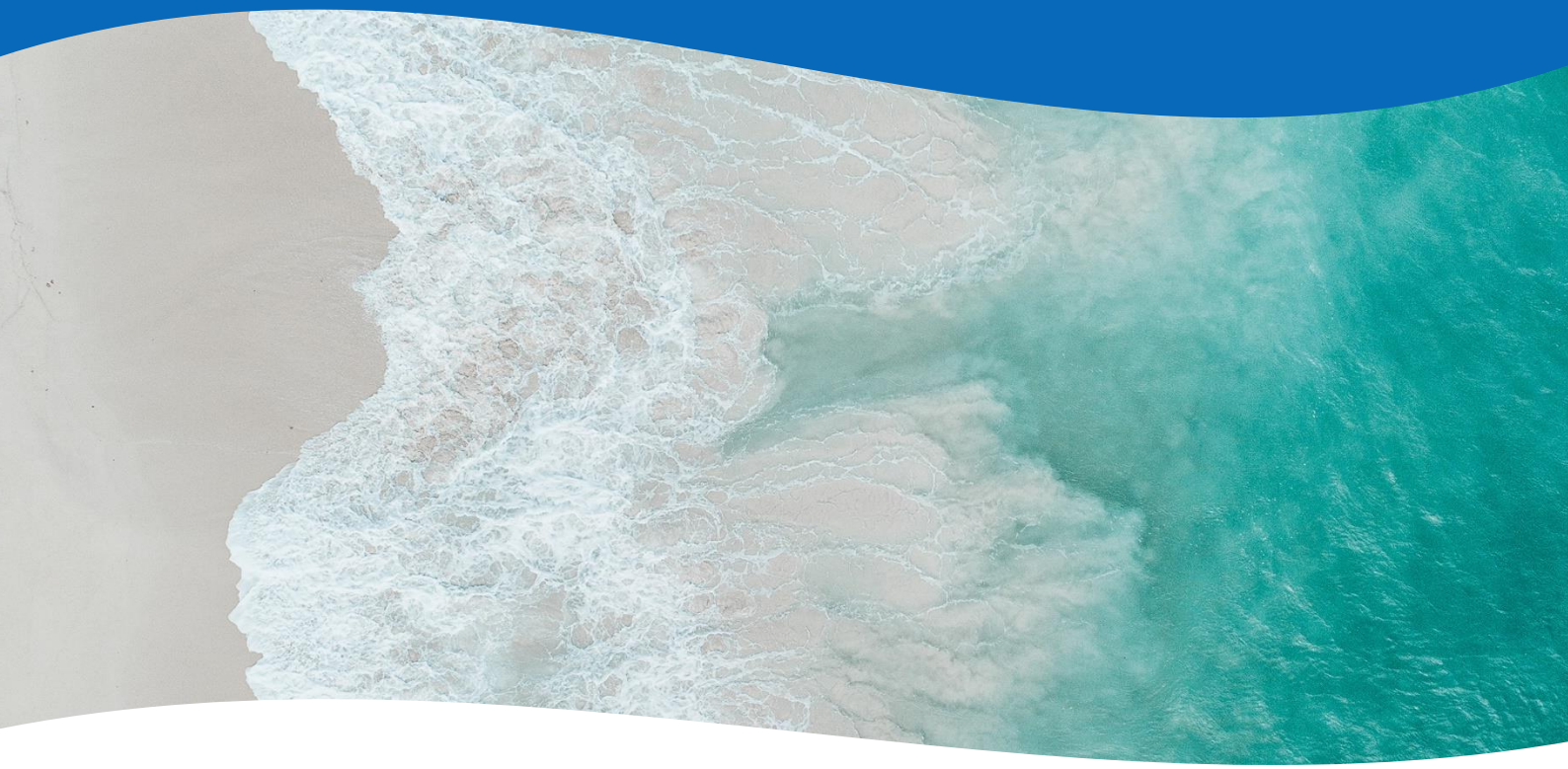
The Process and Information Management System

Authors: Gemma Smith, Amanda Gregory, and Jonathan Atkins



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1	17/10/23	WP3	Amanda Gregory, Jonathan Atkins, and Gemma Smith		

Authors (alphabetical)	
Name	**Organisation**
Atkins, Jonathan	IECS Ltd
Gregory, Amanda	IECS Ltd
Smith, Gemma	IECS Ltd

Acknowledgements/contributions (alphabetical)	
Name	Organisation
Bruno Meirelles de Oliveira	AZTI

DISCLAIMER

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This briefing note is one in a series of documents aimed at supporting the Simple Social-Ecological Guidance. For the complete set of briefing documents, please refer to the accompanying signposting document, which can be found here.

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Contents

1. Why do we need a Process and Information Management System?

In the context of Marine Ecosystem-Based Management (EBM), the Process and Information Management System (PIMS) is a comprehensive framework designed to support the holistic management and conservation of marine ecosystems (Gregory et al., 2023). It serves as a tool to guide the integration of data, stakeholder perspectives, and governance in marine EBM projects, ensuring their success and sustainability. Marine EBM is a multifaceted approach that aims to balance ecological, societal, and economic goals in marine environments. Given the management of the marine environment's complexity, there's a need for a structured system like PIMS to manage the myriad of processes, information, and stakeholders involved (Ritchie & Ellis, 2010). PIMS, with its emphasis on good governance, information provenance, and systematic management, ensures that marine EBM projects are not only scientifically rigorous but also transparent, inclusive, and adaptive to changes. It recognises the dynamic nature of marine ecosystems and the diverse stakeholders involved, ensuring that decisions are evidence-based, equitable, and reflect the interconnectedness of marine socio-ecological systems.

Within the core of PIMS is the Integrated Systems Analysis (ISA) (Elliott, 2020). ISA is regarded as an action learning cycle, and PIMS, especially in marine EBM, ensures that each iteration of this cycle is well-documented, evidence-based, and reflects the dynamic nature of marine ecosystems. Using PIMS in conjunction with ISA ensures that marine EBM projects are not just iterative but also adaptive, transparent, and inclusive, leading to better outcomes for both marine ecosystems and the stakeholders dependent on them (see *Briefing Paper 12: Equity, Diversity and Inclusion*). The PIMS is a crucial component of an Action Learning Cycle (Zimmer, 2001) because it plays a vital role in maintaining good governance and ensuring information provenance and management throughout the process.

2. The PIMS elements

DA Process Management - Refers to the oversight of the Demonstration Area (DA) activities, ensuring that each phase of the project corresponds with its intended objectives. In the wider context of marine EBM, this consideration ensures that the specific goals of ecosystem conservation, sustainable resource use, and stakeholder engagement are integrated and managed.

Resource Management - Centred on the strategic distribution and use of resources, this element ensures the process operates within its stipulated budget and time constraints, efficiently utilising resources, from scientific tools to human expertise, ensuring that marine EBM projects are cost-effective and impactful.

Stakeholder Identification, Engagement and Communication - Involves surfacing and actively involving all relevant people in the process, as well as seeking to create a dialogue that addresses their insights and reservations. This approach includes taking a critical perspective to who and how you are involving stakeholders in the process, ensuring this is done in a meaningful way. In the marine context, this could imply the involvement of everyone from fishermen to policymakers, ensuring that the diverse voices and concerns of all stakeholders are acknowledged in marine management decisions. More information can be found in the briefing paper 'Stakeholders and stakeholder consultation'.

Data Provenance and Management - Underscores the importance of data integrity and traceability. It entails a structured approach to managing data in line with a Data Management Plan (DMP) and respecting data protection standards like GDPR (Regulation 2016/679). This is especially vital in marine

EBM, where data from various sources, including traditional knowledge, satellite imagery, and field studies, needs to be integrated, verified, and managed.

Evaluation – This should comprise a continuous appraisal process that compares the project's progression with predefined standards, enabling timely modifications to enhance outcomes. Assessing the health of marine ecosystems, the effectiveness of management actions, and the satisfaction of stakeholders allows for timely adjustments in strategies.

Governance - Pertains to the establishment and enforcement of clear protocols, rules, and decision-making processes, ensuring the project is conducted ethically, transparently, and efficiently (Boyes & Elliott, 2014). By establishing clear marine governance structures, we ensure that EBM decisions are ethical, legal, and in line with international marine conservation goals.

3. Overview diagram

The various elements of the PIMS will not relate to any specific part of the ISA process; rather, it is an encompassing system which is key in the beginning and throughout to support action learning processes using the DAPSI(W)R(M) Framework (Figure 1).

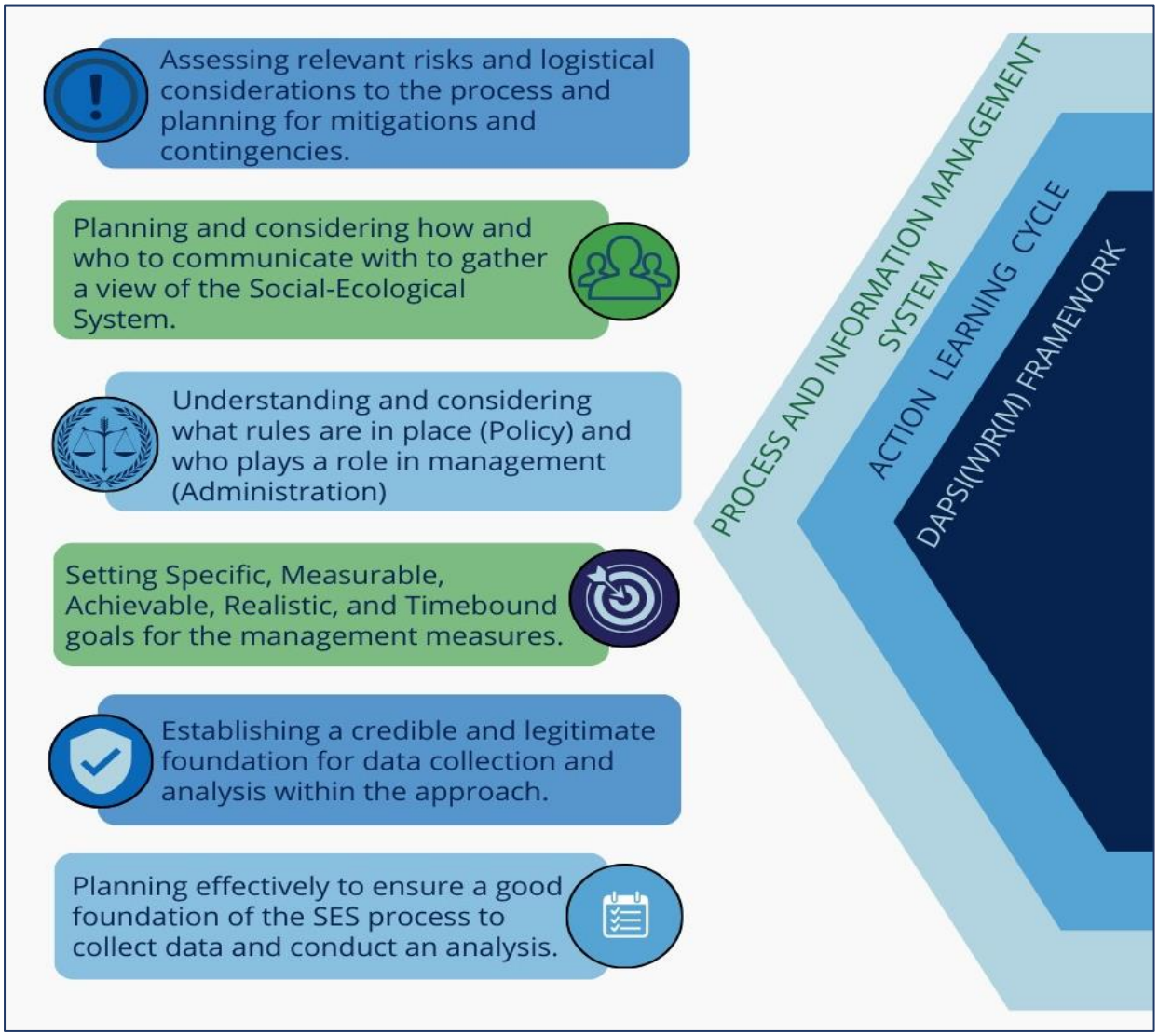

Figure 1: The key PIMs actions encompassing the Learning and action cycle and the DAPSI(W)R(M) framework.

4. References and Further Reading

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