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## Towards Sustainable Seas: ReMAP's Contribution to Monitoring and Evaluating Maritime Spatial Plans

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In compliance with the EU Directive 2014/89/EU on maritime spatial planning (MSP), the first generation of plans has now been approved and is under implementation. Subsequently, there is a growing necessity to monitor and evaluate how effectively these plans fulfil societal needs and promote the economic development of maritime and coastal sectors, while ensuring environmental sustainability and minimising marine ecosystem degradation. The ReMAP project (Reviewing and Evaluating the Monitoring and Assessment of Maritime Spatial Planning) is dedicated to addressing this challenge. The project focuses on developing comprehensive frameworks for monitoring, reviewing, and evaluating MSP to ensure the plans align with long-term objectives and deliver tangible benefits for marine and coastal environments.

ReMAP builds on the advancements made by the Technical Expert Group on data for MSP, which established an EU data standard for sharing maritime spatial plans in 2021. The harmonised MSP plans hosted on the European Marine Observation and Data Network (EMODnet) provide the opportunity to leverage interoperability within an innovative and modular analytical approach to assess MSP performance. ReMAP employs a suite of 10+1 simple, open-access and reusable analytical modules that collectively deliver a comprehensive evaluation of the current status and effectiveness of maritime spatial planning. These tools are designed for flexible use across various MSP phases, including initial development, implementation, monitoring, and evaluation towards the improvement of the MSP plans.

The ReMAP project has focused on three specific use cases to test the developed tools. These are the entire Baltic Sea basin, a cross-border use case in the West Mediterranean, and a local testing

area on the Galician coast in Spain. ReMAP tools are aimed at the development of a range of comprehensive analyses, which include cumulative impact assessments evaluating how various maritime activities collectively impact marine environment; socio-economic analyses that examine the economic effects of maritime sectors; and governance reviews to evaluate the effectiveness and structure of MSP governance. ReMAP also addresses land-sea interaction analyses, studies on the compatibility of marine conservation efforts, and navigation safety assessments. Additionally, the framework evaluates ecosystem services, aligns with EU environmental legislation objectives, and utilises input/output data analytics to manage and evaluate spatial information effectively. The performance of these 10+1 tools is being refined within Alpha (January 2024) and Beta (March 2025) tests developed with the collaboration of stakeholders, framework potential users in each of the use case areas.

The Modular Analytics Framework will be released in October 2025. It is designed to identify specific areas of maritime plans that may require updates or modifications to better address societal needs, support blue growth, and ensure environmental sustainability. ReMAP is developing a comprehensive MSP monitoring and evaluation framework to detect issues that should be considered both during the implementation phase and in the next iteration of planning.

ReMAP's innovative approach to MSP evaluation offers a pathway towards achieving a healthier and more resilient ocean, to advance scientific understanding and promote effective solutions for ocean conservation and sustainable development.