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## Strengthening harmonization in chemical pollution assessment: from data management to dispersion risk evaluation. Interreg project HarmoNIA example

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The overall increase in maritime transport, coastal urbanization and the foreseen rise in offshore activities pose serious risks of pollution for the Mediterranean Sea and in particular for the Adriatic - Ionian sub-regions. At regional or sub-regional levels, countries should manage marine natural resources and preserve ecosystem services with a common approach: adopting shared monitoring protocols, a "good environmental status (GES)" definition and assessment.

The legal framework for the environmental protection of the sea is nowadays as complex as the ocean itself. The pillars for the protection of the marine environment and for the sustainable management of maritime activities in Europe are the Marine Strategy Framework Directive (MSFD) and the Maritime Spatial Planning Directive (MSPD). In the Adriatic – Ionian marine sub-regions the implementation of several EU and regional environmental policies needs improved coherence and harmonization, particularly in the assessment of contamination from hazardous substances.

Concentration of contaminants is one of the descriptors of GES according to the MSFD as well as one of the Ecological Objectives of the Barcelona Convention for the Protection of the Mediterranean Sea. To enhance the capacity to tackle environmental vulnerability and safeguard ecosystem services a large effort is being dedicated to share best practices to monitor contaminants, assess ecosystem status, and to strengthen the network of data infrastructures to facilitate access and re-use of marine data among countries bordering the Adriatic – Ionian Seas. The Adrion region is characterized by intense use of the maritime space and a further increase of maritime activities is foreseen. This may seriously threaten the ecosystem status by causing contaminant release in the environment. In this context, data of reliable quality is required to evaluate effects of anthropogenic pressures on marine ecosystems and to plan a sustainable use of the sea. However, data are often fragmented in several institutions, not easily accessible, highly heterogeneous and sometimes even not comparable.

In this framework, the Interreg project HarmoNIA, will use consolidated EU initiatives such as EMODnet and Sea-DataNet for the management and supply of fragmented marine data, to facilitate data and information exchange within the Adriatic- Ionian region and to allow the evaluation of pollution dispersion risk in coastal zones. To address the requirements for the implementation of the environmental policies in the Adriatic – Ionian region, Harmonia aims at sharing knowledge and competences, aligning strategies trans-nationally.