

A METHODOLOGY FOR A SUSTAINABLE IMPLEMENTATION OF THE EU WATER FRAMEWORK DIRECTIVE IN SEAPORTS

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ABSTRACT

The new European Directive (2000/60/EC) –the EU Water Framework Directive (WFD)– apply to seaports, on including maritime, coastal and transitional waters within its objectives for protection of the European aquatic ecosystems.

Many administrations and organisations of the port sector have repeatedly shown concerns for significant effects and consequences, in the medium to long term, that implications and ways of application of this Directive could generate in port development and ongoing port activities, as soon as in the competitiveness of maritime transport. For these reasons, it considers that's essential and urgent to have available some scientifically and technically robust tools that can contribute to management of the quality of port waters in a integrated, complete and objective manner, in concordance with underlying principles of the aforementioned Directive. But making it compatible with the reality of the port sector and with the necessary sustainability of ports activities and maritime transport. Only by this way we'll enable identify problems that this Directive could potentially create for ports from an early stage and have them resolved before they take place. This will allow us to exert a real and effective influence before competent regulator bodies and environmental authorities that are leading implementation processes of the Directive in advance as well.

With these main objectives, the paper introduces the first methodological and technical tool developed in Spain for the integral management of the seaport water quality, with direct incidence both for the design, evaluation and environmental assessment of the infrastructure works and for port activities and operations, with an approach these issues from an objective point of view and under principles of sustainable development. This methodology is applicable both to existing port facilities and new ports or new facilities in existing ports.

The arrangement for the presentation will be in the following six items:

- Definition of methods and procedures for the delimitation and designation of types of port water bodies, considering port waters as heavily modified water bodies.
- Definition of a system of indicators for the chemical quality and ecological potential of the port waters, including objectives and allowed quality rates.

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- Establishment of a programme to evaluate and manage the environmental risk for port water bodies. As first step, this programme allows identify the source of pollution, due to external emissions, ongoing port activities and accidents, and assess the incidence that each contaminant emission has in the quality of port waters. As second step, the programme facilitates the evaluation of the risk for each emission, through the definition of some few simple levels of:
 - probabilities of occurrence of the emission.
 - vulnerabilities of the potentially affected water bodies
 - consequences of its materialisation.
 Depending on the allowance of obtained risk by multiplication of these three factors, where appropriate possible preventive and corrective measures must be introduced with the aim to reach reducing risk till allowed values. Therefore, this programme is the fundamental element for the integral management of the quality of port waters from the point of view of sustainable development of port activities and for the identification whose is the responsibility of the source of pollution, sometimes completely outside to the port activity.
- Development of a catalogue of available preventive and corrective measures.
- Establishment of a system for environmental monitoring, tracking and vigilance of port water quality.
- Definition of best practices for the environmental management of port waters.

The paper will also present a demonstration of the application of this methodology to some Spanish ports.

This methodological tool has been included in the well-known Spanish standardisation programme in the field of ports (ROM PROGRAMME), under the denomination of "ROM 5.1. QUALITY OF COASTAL WATERS IN SEAPORT AREAS".

Due to problems that the implementation of UE Water Framework Directive (WFD) is creating in European seaports at the present time, the Spanish experience can be of great interest for other countries. The presentation of this paper in an international congress could promote an interesting debate at international level on existing experiences and the best way to implement the WFD in port areas, always guaranteeing the necessary sustainability of ports and port activity.□

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