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Environmental impact assessment in line with the EU Nature Directives

The debate on a sustainable performance of human activities impacting the marine environment needs to be more objectively structured and scrutinized. For this, the assessment criteria developed under the EU Nature Directives (Marine Strategy Framework Directive (MSFD), Habitat Directive (HD, Water Framework Directive WFD)) can form the basis for a scientifically, more uniform environmental impact assessment (EIA). The list of criteria, funded by operational indicators allow a more objective assessment of the degree of impact on the marine ecosystem across human activities. A major obstacle is the variety of criteria between EU Directives, which is likely to be harmonized for Belgian waters. The alliance of the EU Directive requirements and the assessment of pressures on the ecosystem is illustrated by the evaluation of the activity of disposal of dredged material at designated areas on the Belgian Part of the North Sea. The disposal of dredged material has effects on the water surface, in the water column and on the seabed. These effects are followed up in a joint monitoring program and a periodical integrated assessment is made, which is now put in line with the MSFD requirements. 10 MSFD criteria/indicators out of the list of 50 used in Belgium have a clear relevance to this activity. Those relevant indicators are related to evaluation of the characteristics of the bottom fauna, chemical pollution and physical changes of the disposal areas. An integrated assessment of those indicators is made and easily visualized by means of a star diagram. Based on this information, the effect of the activity itself can be evaluated, monitoring optimized and appropriate management measures be taken in relation to the requirements of the EU Directives.

