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According to the Water Framework Directive 2000/60/EC (WFD), the assessment of the chemical status of a surface water body is based on compliance with Environmental Quality Standards (EQS) set in the Directive 2008/105/EC. The directive lays down the EQSs for 41 substances in the water matrix, but also gives an option to the Member States to derive EQS for those pollutants that tend to accumulate in sediment and/or biota.

WFD acknowledges that sediment and biota are important matrices for the monitoring of certain substances with significant potential for accumulation. In order to assess long-term impacts of anthropogenic activity and trends, Member States should take measures, subject to Article 3(3) of the EQS Directive, with the aim of ensuring that existing levels of contamination in biota and sediment will not significantly increase.

The Common Implementation Strategy (CIS) of the WFD entails the development of guidance documents allowing a proper implementation of this directive and its daughter directives. A couple of guidance documents have been produced as request of Member States for further technical details on the implementation of different type of monitoring programmes (surveillance, operational and investigative) under the WFD. Furthermore, the guidelines have been developed in accordance with best available techniques, standard procedures and common practices in the field enhancing at the same time the degree of harmonisation.

The aim of this communication is to present the new guidance [1] for the monitoring of priority pollutants as well as of river basin specific pollutants which tend to accumulate in sediment and biota (Fig. 1). This guidance document is not legally binding but offers a common approach as regards sediment and biota monitoring, addresses the different requirements on the compliance checking and the temporal trends monitoring for biota and sediment. This guideline takes into account current scientific knowledge and should allow a harmonised implementation of sediment and biota monitoring across Europe.

Fig. 1: The cover of the new guidance

The guidance includes recommendations for the matrix selection for the monitoring of chemical pollutants in different water bodies and discusses general principles of the monitoring strategy to assess compliance with EQS and compliance with the no deterioration objective of the WFD. Harmonisation of the different tools of monitoring programmes are discussed: e.g. site selection, sampling strategy, sample preparation, choice of analytical methods and data normalization, alternative monitoring tools (e.g. passive sampling).


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