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ABSTRACT

In its decision (2010/477/EU) relating to the European Marine Strategy Framework Directive (MSFD, 2008/56/EC), the European Commission identified the following points as focuses for monitoring:

(i) 10.1.1: Trends in the amount, source and composition of litter washed ashore and/or deposited on coastlines,
(ii) 10.1.2: Trends in the amount and composition of litter in the water column and accumulation on the sea floor,
(iii) 10.1.3: Trends in the amount, distribution and composition of micro-particles (mainly microplastics), and
(iv) 10.2.1 Trends in the amount and composition of litter ingested by marine animals.

Monitoring the impacts of litter will be considered further in 2014. At that time, the strategy will be discussed in the context of the Mediterranean Sea, providing information on constraints, protocols, existing harm and research needed to support monitoring efforts.

The definition of targets and acceptable levels of harm must take all factors into account, whether entanglement, ingestion, the transport and release of pollutants, the transport of alien species and socio-economic impacts. It must also reflect on the practical deployment of "ingestion" measures (10.2.1). The analysis of existing data will reveal the potential and suitability of some higher trophic level organisms (fish, turtles, birds and mammals) for monitoring the adverse effects of litter. Sea turtles appear to be useful indicator species, but
the definition of an ecological quality objective is still needed, as well as research on alternative potential indicator species.