

**Table 1. Availability of seafloor integrity monitoring parameters for D6 indicators under different legal instruments (Zampoukas et al. 2012)**

MSFD Descriptor 6 indicators	MSFD Monitoring Parameters (from Craglia et al., 2010a)	Water Framework Directive	Habitats Directive	Birds Directive	Common Fisheries Policy	Environmental Quality Standards Directive	Regional Sea Conventions
6.1.1 Type, abundance, biomass and areal extent of relevant biogenic substrate	Habitats (predominant, special, protected and endangered) characteristics Invertebrate bottom fauna species composition and its annual/seasonal variability Seabed Structure Seabed Substrata Composition Seabed Topography	Benthic Invertebrate Fauna Composition Bed Quantity Bed Structure Bed Substrate	Natural range of natural habitat types of community interest Area covered by natural habitat types of community interest Specific structure of natural habitat types of community interest				
6.1.2 Extent of the seabed significantly affected by human activities for the different substrate types	Angiosperms biomass and its annual/seasonal variability Macro-algae biomass Extraction Seabed Structure Seabed Substrata Composition Seabed Topography Sealing Smothering	Angiosperms Abundance Angiosperms Cover Benthic Invertebrate Fauna Abundance Macro-algae Abundance Macro-algae Cover					
6.2.1 Presence of particularly sensitive and/or tolerant species	Angiosperms species composition and its annual/seasonal variability Invertebrate bottom fauna biomass and its annual/seasonal variability Invertebrate bottom fauna species composition and its annual/seasonal variability Macro-algae species composition	<i>(Note: despite affected seabed is not directly measured, abundance and cover of benthic species can be considered a proxy)</i> Macro-algae Species Composition Angiosperms Composition Macro-algae - Presence of Sensitive Taxa Angiosperms Presence of Sensitive Taxa Benthic Invertebrate Fauna Composition Benthic Invertebrate Fauna - Presence of Sensitive Taxa					HELCOM
6.2.2 Multi-metric indexes assessing benthic community condition and functionality, such as species diversity and richness, proportion of opportunistic to sensitive species	Angiosperms species composition and its annual/seasonal variability Invertebrate bottom fauna species composition and its annual/seasonal variability Macro-algae species composition	Angiosperms Composition Benthic Invertebrate Fauna Composition Benthic Invertebrate Fauna Diversity Macro-algae Species Composition					HELCOM Black Sea Conv.
6.2.3 Proportion of biomass or number of individuals in the macrobenthos above some specified length/size							
6.2.4 Parameters describing the characteristics (shape, slope and intercept) of the size spectrum of the benthic							