



Document title	Regional list of human uses and activities and pressures
Code	4-2
Category	INF
Agenda Item	4 - Guidance on information and data for MSP
Submission date	16.9.2015
Submitted by	HELCOM Secretariat
Reference	

Background

Marine Strategy Framework Directive, adopted on 17 June 2008, aims to achieve Good Environmental Status (GES) of the EU's marine waters by 2020 and to protect the resource base upon which marine-related economic and social activities depend

MSFD Annex III is intended to provide lists of 'elements' for features of marine waters and marine ecosystems, and for pressures, impacts and human activities affecting these features. The elements should be used for

- the initial assessment
- GES determination
- setting environmental targets
- establishing monitoring programmes

Now the MSFD Annex III is under a possible revision where human uses and activities could be added as new table to indicative list of elements for reporting and assessment.

Lists of possible human activities are also included in the MSP directive, as well as other pieces of EU legislation.

HELCOM is currently working on the second holistic assessment of the ecosystem health of the Baltic Sea, which will also assess pressures from human activities. Based on the recommended listing under MSFD Annex III, we are currently reviewing and scoring the relevance of various human activities and pressures for the Baltic Sea, which will result in a regional list of those.

When the activities and pressures are categorized in a consistent way, the data and information collected under other policies will be used more effectively.

HELCOM will report on the list once it has been finalized.

Action required

The Meeting is invited to take note of the ongoing work to establish a regional Baltic list of relevant human activities and pressures on the marine environment and consider its use also for MSP purposes.

MSFD Annex III

The MSFD Annex III provides an indicative lists of elements to be taken into account in an initial assessment of the marine waters. The list of elements contains characteristics of marine environment and pressures and impacts affecting the marine areas, which are the basis for the assessment of environmental status within the MSFD. Now the decision on GES criteria and methodological standard together with the Annex III are under a possible revision. The revision of Annex III is also linked to reporting systems and underlying standardized lists of elements.

The elements in MSFD Annex III are indicative, hence they may not be essential, predominant or relevant in every marine region. To identify the essential elements for each marine region, there should preferably be a commonly understood list of elements for each region. In addition, the term 'pressure' needs to be determined commonly and used consistently to increase the common understanding.

The current list of elements does not cover human activities which could be used in the assessments of uses of marine waters (under Article 8.1c of MSFD) and on human activities (under Article 8.1b of MSFD). The revision is recommending a new table to be added on human uses and activities (att. table 1) which would provide **a level of consistency in how the human uses and activities are assessed and provide a framework for the collection of information and monitoring.**

HELCOM, through its activities to prepare the second holistic assessment of the ecosystem health (cf. document 4-1), is reviewing and ranking relevance of different pressures and human activities in the Baltic Sea, taking the recommended MSFD Annex III list as the starting point.

The data on human activities (att. table 1) and pressures (att. table 2) should be categorized in more detail and it is suggested that these categories, when developed, are used consistently in the region to support a common understanding of the elements and enhance the proper use of data, also highlighting the meaning of scale. Although several pressure have relevance to the marine environment, they may be different in the scale of their importance. For example the importance between coastal and offshore zone may change within pressures.

There are parallel data needs in implementation and reporting of the Helsinki Convention and Baltic Sea Action Plan, MSFD, WFD and MSP directives. When the activities and pressures are categorized in a consistent way, the data and information collected under other policies will be used more effectively. The data on human activities needs to be collected under MSP Directive, too, as the pressures caused by human activities and marine use should be taken in to account when establishing maritime spatial plans. The MSP directive has a list on possible human activities (att. table 3) which could be used for identifying the spatial and temporal distribution of existing and future activities and uses in marine waters. Other reporting processes can be linked to ensure synergies in data collection and data use as well. For example EMODnet is also assembling data on human activities and Eurostat on economic activities.



Proposed MSFD Annex III revision on human activities (table 1) and pressures (table 2) as well as human uses and activities (table 3) separated in MSP Directive Article 8.

Please note that the lists in table 1 and 2 may change and HELCOM is currently adapting the lists in order to establish the regional list relevant for the Baltic Sea.

Table 1: Typology of uses and activities relevant to the marine environment.

Theme	Activity	Sub-activity (this column is not for inclusion in Annex III, just for illustrative purposes)	
Physical restructuring of coastline or seabed (including construction phase)	Land claim (permanent changes)		
	Canalisation and other watercourse modifications	Canalisation Culverting/trenching Causeways and dams	
	Coastal defence and flood protection	Sea walls Breakwaters Groynes	Flood protection
			Dredging (for navigation purposes)
	Semi-permanent restructuring of seabed morphology	Beach replenishment/ nourishment	
Man-made structures (incl. construction phase)	Urban developments		
	Industrial developments		
	Transport infrastructure	Bridges Causeways	Tunnels
	Tourism & leisure infrastructure - land-based structures		
	Tourism & leisure infrastructure - sea-based structures	Piers Marinas Slipways	
	Ports and other coastal constructions	Ports Harbours	
	Offshore marine infrastructure (including associated with mineral and energy extraction)	Offshore platforms (oil, gas) Renewable energy infrastructure Artificial reefs and islands	
Cables & pipelines	Trenching		
Extraction of non-living resources	Extraction of oil and gas	Exploration for oil and gas Extraction of oil & gas Decommissioning of structures	
	Extraction of sand and gravel		
	Extraction of rock & minerals	Exploration for minerals Extraction of rock & minerals	
	Extraction of salt		
Extraction of energy	Renewable energy generation (wind, wave & tidal power)	Wind energy production	
		Tidal energy production	
		Wave energy production	
	Non-renewable energy generation	Fossil fuel energy production	
Nuclear energy production			
Extraction of living resources	Fish & shellfish harvesting (professional, recreational)	Potting/ creeling	
		Netting	
		Demersal long lining	
		Pelagic long lining	
		Benthic trawling	
		Pelagic trawling	
		Demersal seining	
Purse seining			

Theme	Activity	Sub-activity (this column is not for inclusion in Annex III, just for illustrative purposes)
		Benthic dredging
		Suction/ hydraulic dredging
		Leisure fishing
		Hand collecting (shellfish)
	Marine plant harvesting	Machine collection (fucooids, kelp)
		Dredging (maerl)
		Hand collecting (seaweed)
	Hunting and collecting (e.g. for non-food purposes)	Hunting
		Harvesting/ collecting eggs
		Collecting (curios)
Cultivation of living resources	Aquaculture	Bait digging
		Fin-fish mariculture
		Seaweed culture
	Shellfish mariculture	
	Agriculture	
	Forestry	
Uses of environment and infrastructure	Transport - shipping	Passage Anchorage
	Transport - air	
	Tourism and recreation	Boating, yachting
		Beach use
		Water sports (surface)
		Scuba diving
		Wildlife watching
	Research and survey	
	Military use	Military - waste disposal (munitions)
Waste and material disposal	Solid waste disposal, incl. dredge material	
Carbon sequestration		

Table 2: Common typology of pressures on the natural (marine) environment resulting from anthropogenic activities, and an indication of their relevance (yes=can be significant; +=typically limited) to the coastal and offshore zones. White rows could be excluded from a revised MSFD Annex III Table 2.

Pressure themes	Pressures	Relevant to 0-1nm	Relevant beyond 1mn ¹
Physical	Change of seabed substrate or morphology (~ physical loss)	Yes	Yes
	Disturbance or damage to seabed	Yes	Yes
	Extraction of seabed or subsoil (e.g. sand, gravel, rock, oil, gas)	Yes	Yes
Hydrological	Input of water	Yes	+
	Changes to hydrological conditions	Yes	Yes
	Extraction of water	Yes	
Energy	Input of sound	+	Yes
	Input of electromagnetic and seismic waves	+	Yes
	Change in water temperature	+	
	Input of light	+	+
Chemicals and other pollutants	Input of nutrients and organic matter	Yes	Yes
	Input of contaminants (synthetic substances, non-synthetic substances, radionuclides) - diffuse sources, point sources, acute events	Yes	Yes

¹ Beyond 1nm refers to outside of WFD Coastal Waters.

Pressure themes	Pressures	Relevant to 0-1nm	Relevant beyond 1nm ¹
	Input of CO ₂ [and other greenhouse gases]	Yes	Yes
	Input of litter (solid waste matter, including micro-size litter)	Yes	Yes
Biological	Extraction or, or mortality/injury to, species (targeted, non-targeted)	Yes	Yes
	Disturbance of species	Yes	+
	Translocation of (native) species	+	
	Introduction of genetically modified species	+	+
	Introduction or spread of non-indigenous species	Yes	Yes
	Introduction of microbial pathogens	Yes	+
	Cultivation/artificialisation of natural habitat	+	

Table 3: Possible activities and uses and interests may be taken into consideration in design and determining the coverage of maritime spatial plans, in Article 8 in Maritime Spatial Planning Directive.

Human use and activity
aquaculture areas
fishing areas
installations and infrastructures for the exploration, exploitation and extraction of oil, of gas and other energy resources, of minerals and aggregates, and for the production of energy from renewable sources
maritime transport routes and traffic flows
military training areas
nature and species conservation sites and protected areas
raw material extraction areas
scientific research
submarine cable and pipeline routes
tourism
underwater cultural heritage