

Marine bird measures –compilation from MSFD reporting

(NEA PANACEA Task 4.3)

According to MSFD Article 13(1)

- Member States shall, in respect of each marine region or subregion concerned, identify the measures which need to be taken in order to achieve or maintain good environmental status, as determined pursuant to Article 9(1), in their marine waters.
- Those measures shall be devised on the basis of the initial assessment made pursuant to Article 8(1) and by reference to the environmental targets established pursuant to Article 10(1), and taking into consideration the types of measures listed in Annex VI.

Full reporting of MSFD measures in the EU Member States is available from:

<https://water.europa.eu/marine/data-maps-and-tools/msfd-reporting-information-products/msfd-reporting-data-explorer/msfd-c3>

However, the very long lists of measures are difficult to compare with efforts to protect marine birds. This is easier done by using the assessments of the Programmes of Measures (PoM) of each Member State under Article 16 MSFD. Therefore, the measures were extracted from the *Article 16 Technical Assessment of the MSFD 2015 reporting on Programme of Measures of 2017*, in which the EU Commission reviewed the Programmes of Measures (PoM) of all individual Member States (including UK). The reports for the Member States (MS) from the OSPAR Region were downloaded from:

https://ec.europa.eu/environment/marine/eu-coast-and-marine-policy/implementation/reports_en.htm.

The PoM addressing birds are very diverse among the MS. Further, they are mostly formulated in very general terms, at least from their title. It would need to read hundreds of measure descriptions to get better inside into which pressures and which species groups or even species are addressed. From the Article 16 assessments it was possible to extract the Key Type Measures (KTM) for bird related measures, country by country. Note that more than one KTM could be assigned to an individual measure. The KTM are partly identical with those used in the Water Framework Directive (WFD01-WFD25), but supplemented by MSFD specific KTM (MSFD26-MSFD39). The KTM are defined in:

European Commission 2018. Reporting on Programmes of Measures (Art. 13), on exceptions (Art. 14), and on interim reports (Art. 18) for the Marine Strategy Framework Directive. DG Environment, Brussels. Pp 43 (MSFD Guidance Document 12). https://www.eionet.europa.eu/etcs/etc-icm/docs-1/msfd_guidance_document_12.pdf

Measures were considered if:

- directed to waters in OSPAR Region (i.e. excluding Mediterranean and Baltic for the Member States ES, FR, DE, DK, SE),
- listed as directed to birds (i.e. excluding horizontal measures; however, this was treated very differently among the MS).

The mentioning of KTM in the Member States' PoM are summarised in Table 1.

Table 1: Summation of Key Type Measures (KTM) indicated in the Article 16 MSFD assessments of the individual Member States. KTM codes refer to the Water Frame Direction measure types, with added MSFD measure types numbered consecutively. The seven most frequently mentioned measures are printed in bold. KTM not applicable to marine waters are printed in grey.

KTM code	Key Type Measure	total entries	SE	DK	DE	NL	BE	UK	IE	FR	ES	PT
WFD01	Wastewater treatment plans	0										
WFD02	Nutrient pollution from agriculture	0										
WFD03	Pesticides from agriculture	1							1			
WFD04	Historical contamination	1							1			
WFD05	Longitudinal continuity	1								1		
WFD06	Improving hydromorphological conditions	1			1							
WFD07	Improving flow regimes	0										
WFD08	Water efficiency technical measures	0										
WFD09	Water pricing policy - households	0										
WFD10	Water pricing policy - industry	0										
WFD11	Water pricing policy - agriculture	0										
WFD12	Advisory services for agriculture	0										
WFD13	Drinking water protection	0										
WFD14	Research and knowledge	8	2		1						5	
WFD15	Hazardous substances	0										
WFD16	Improving industrial wastewater treatment plants	0										
WFD17	Reducing sediments	0										
WFD18	Invasive alien species	1							1			
WFD19	Recreation and angling	1	1									
WFD20	Fishing and other exploitation	6			3		1		2			
WFD21	Urban and transport pollution	4	4									
WFD22	Pollution from forestry	0										
WFD23	Natural water retention	0										
WFD24	Adaptation to climate change	0										
WFD25	Counteract acidification	0										
MSFD26	Physical loss	16	1		3		1		10	1		
MSFD27	Physical damage	29			8	3			14	4		
MSFD28	Energy inputs	9			4				5			
MSFD29	Litter	6	2						3	1		
MSFD30	Hydrological processes	1	1									
MSFD31	Contamination	4					1		3			
MSFD32	Accidental pollution	4							2		2	
MSFD33	Nutrient enrichment	1							1			
MSFD34	Non-indigenous species	9						2	7			
MSFD35	Extraction of species	41	3		5	1	1		18	2	11	
MSFD36	Other biological disturbance	33			1	3		4	24	1		
MSFD37	Restore and conserve marine ecosystems	70	1	1	9	7	1	3	19	2	27	
MSFD38	Spatial protection	51	3	1	1	2	1	3	15	6	19	
MSFD39	Other measures	14	4	1	1				2	3	3	
WFD99	Other key type measure reported under PoM	1			1							

Table 3 highlights the five most frequent entries of KTM per Region. There are is much consistency in this across the Regions, because four KTM are among the five most frequently entered ones in every Region. These are the KTM MSFD37 (Restore and conserve marine ecosystems), MSFD38 (Spatial protection), MSFD35 (Extraction of species) and MSFD27 (Physical damage). The measures are mostly directed against certain human activities

Table 3: The top five KTM per OSPAR Region (no. of entries).

Region II		Region III		Region IV	
MSFD37 Restore and conserve marine ecosystems	24	MSFD36 Other biological disturbance	29	MSFD37 Restore and conserve marine ecosystems	29
MSFD38 Spatial protection	18	MSFD37 Restore and conserve marine ecosystems	24	MSFD38 Spatial protection	25
MSFD27 Physical damage	15	MSFD38 Spatial protection	24	MSFD35 Extraction of species	13
MSFD35 Extraction of species	12	MSFD35 Extraction of species	20	WFD14 Research and knowledge	5
MSFD36 Other biological disturbance	9	MSFD27 Physical damage	18	MSFD27 Physical damage	4

In order to explore which are the main pressures and activities against which the four KTM among the top five KTM in all Regions are directed, the entries for pressure (OSPAR terminology) and activity for the KTM MSFD37, MSFD38, MSFD35 and MSFD27 were aggregated. It is important to know that the respective compilations in Tables 4 and 5 are strongly biased, because for many bird-related measures no pressures or activities were reported (or “various”, which includes unknown pressures and activities).

Table 4: Pressure entries summed up for each of the four most frequently entered KTM (bird-related measures across the OSPAR Regions II, III and IV).

KTM	Removal of non-target species	Penetration/disturbance of substrate	Litter	Introduction/spread of NIS	Introduction of light	Visual disturbance	Physical loss
MSFD37 Restore and conserve marine ecosystems	7	7	1	4	2	2	1
MSFD38 Spatial protection	7	4	5	2	1	1	
MSFD35 Extraction of species	27	8	3	1			
MSFD27 Physical damage	7	10	3	1			

Table 5: Activity entries summed up for each of the four most frequently entered KTM (bird-related measures across the OSPAR Regions II, III and IV).

KTM	Fisheries	Shipping	Extraction of non-living resources	Hunting	Renewable energies	Recreation	Land reclamation	Maintenance of cable/pipelines	Research	Civil aviation	Aquaculture
MSFD37 Restore and conserve marine ecosystems	12	3	3	1	2	3	2	2	1	1	
MSFD38 Spatial protection	12	3			1						
MSFD35 Extraction of species	23			4							
MSFD27 Physical damage	7	1	3	1	1	1	2	1	1		1

It is obvious that the majority of measures for marine birds is aimed against impairment from fisheries and the related pressures removal of non-target species (i.e. bycatch) and penetration of the substrate (which mostly refers to bottom-trawling). This holds across KTM addressing the restoration and conservation of ecosystems (MSFD37), spatial protection (MSFD38), extraction of species (MSFD35) and physical damage (MSFD27). Other pressures and activities are much less represented.