**Factsheet for new measures**

*This measure fact sheet is the result of coordination between the UBA project Implementation of the Marine Strategy Framework Directive (MSFD) in Bulgaria – Development of Programmes of Measures under Article 13', carried out by Fresh Thoughts/Intersus, and the EC project (DG Environment) 'Technical and administrative support for the joint implementation of the Marine Strategy Framework Directive (MSFD) in Bulgaria and Romania – Phase 2', carried out by ARCADIS-Belgium.*

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| **Measure characteristics**  | **Management area:*** ***Black Sea***

***Any other codes*** | **Code:*****MSFD reporting code*****No. of measure:****14** |
| **Measure title** | Elaboration/update of management plans for MPAs according to requirements of the MSFD and including both national and common targets   |
| **Short, precise description of the measure** | This measure is developed as coordinated measure between Bulgaria and Romania in the scope of EC project (DG Environment) “Technical and administrative support for the joint implementation of the Marine Strategy Framework Directive (MSFD) in Bulgaria and Romania – Phase 2”. The measure aims at setting up mixed working group for management plan elaboration/updating which will be subject to public consultations.In Bulgaria there are defined 17 protected areas which boundaries include terrestrial and marine part, 2 marine territories and 1 marine area. The measure is general common one, applicable for both countries. It will contain number of following steps for its effective implementation: 1. Review of existing situation according to the MPAs defined under Habitats Directive and Birds Directives. 2. Analysis if there is a need of creating new protected areas for protection of species that have not been a subject of protection, but their status is assessed as not good. If it is considered that there is such need, procedure for preparation of order for new MPAs will be open. 3. Development of MPA management plans, if necessary and their entry in force.  |
| **EU measure category** | 2a |
| **Key Types of Measures** | KTM 19 Measures to prevent or control the adverse impacts of recreation including anglingKTM 20 Measures to prevent or control the adverse impacts of fishing and other exploitation/removal of animal and plantsKTM 27 Measures to reduce physical damage in marine waters (and not reported under KTM 6 in relation to WFD Coastal Waters)KTM 37 Measures to restore and conserve marine ecosystems, including habitats and species |
| **Environmental targets** | Biodiversity – FishRO1.1.1 and 1.2.2 Distribution area is not adversely affected by human pressure and should be within the range of values in the last two decades and the selected species recorded over 50% attendance in the samples.1.2.1 The size of the analyzed population is not adversely affected by human pressure and should be within the range of values in the last two decades.1.3.1 The study population is not adversely affected by human pressure and should be within the range of values in the last two decades.Biodiversity – BirdsRO1.1.1 Maintain or increase in sustainable limits (to be determined) the distribution of migratory species Mediterranean shearwater (*Puffinus yelkouan*).1.2.1. The population abundance/size (number of migratory individuals) of Mediterranean shearwater (*Puffinus yelkouan*) remains within 95% of the natural abundance of migratory species in Romania and increases in the long term.1.4.1. Preserve the habitats of Mediterranean shearwater (*Puffinus yelkouan*) by decreasing the pressure from human and natural factors.1.5.1. The area of the habitats of the Mediterranean Shearwater (*Puffinus yelkouan*) is maintained or is increasing.Biodiversity – MammalsRO1.1.1 Maintaining the distribution and frequency of species by implementing adequate management measures1.2.1 Maintaining positive trend in the number of marine mammals populations by implementing the Action Plan for the Conservation of Dolphins in Romanian waters of the Black Sea1.3.1 Diminishing natural mortality by maintaining the good condition of the environment and fishery resources. Reducing bycatch by adequate management measures. Biodiversity – Water column habitatsRO90th of phytoplankton biomass do not exceed the thresholds values in 10 % of the summer observations for the last 6 years.Biodiversity – seabed habitatsRO6.1 Physical damage, having regard to substrate characteristics6.1.1 Type, abundance, biomass and extent of relevant biogenic substrate• Total ban any demersal fishery (trawl, honey), including the EEZ • Stopping any hydraulic or coastal protection works likely to destroy or lead to clogging natural rocky bottom• Stopping any hydraulic or coastal protection works of nature to destroy *Zostera noltei* grasslands or indirectly affect them; total ban on any kind of human activity in *Zostera noltei* meadows, except for scientific research and interventions for saving lives.• Stopping any hydraulic or coastal protection works of nature to destroy belts *Cystoseira barbata* or indirectly affect them; total ban on any type of human activities *Cystoseira barbata* belts except scientific research and interventions to save lives. 6.2 Condition of benthic community6.2.1 Presence of particularly sensitive species and / or tolerant • Coverage with *Z. noltei* ≥ 50%; decapod frequency *Palaemon adspersus* in 1 m2 = 100%; decapod frequency *Carcinus aestuarii* in transects of 50 m2 ≥ 30%• Coverage with *C.barbata* inside the belt ≥ 50%; frequency of *Colaconema thuretii* in 1m2 ≥ 80%; gastropod frequency *Gibbula divaricata* in 1 m2 ≥ 30%; gastropod frequency *Tricolia pullus* in 1 m2 ≥ 1%• Frequency of *Lithothamnion, Phyllophora* or *Coccotylus* in transect of 50 m2 ≥ 10% ; decapod frequency *Liocarcinus* *navigator* in transect of 400 m2 ≥ 70% • Polychaets frequency *Ophelia bicornis* in samples ≥ 1%; frequency of *Gastrosaccus sanctus* in samples ≥ 50%• Decapod frequency of *Eriphia verrucosa* in transects of 100 m2 ; densities of *Halichondria panicea* in the habitat ≥ 1 colonie m-26.2.2 Multimetric indices for assessment of benthic community condition and functionality, as well as species diversity and richness report opportunistic species / species sensitive• Index values EEI > 0.6• Index values EEI > 0.• Indices values :M-AMBI ≥ 0,55; AMBI ≤ 3,3• Indices values :M-AMBI ≥ 0,55; AMBI ≤ 3,3• Indices values :M-AMBI ≥ 0,55; AMBI ≤ 3,36.2.3 Proportion of biomass or number of individuals over a certain length or size• Specimens median size of *Mytilus galloprovincialis* (shell leght) ≥ 50 mm SL• Specimens median size of *Mytilus galloprovincialis* (shell leght) ≥ 70 mm SL |
| **Descriptors** | D1- BiodiversityD4– Food webD6 – Seabed |
| **Main pressures** | Biological disturbances - selective extraction of species, including incidental non-target catches (e.g. by commercial and recreational fishing)- introduction of non-indigenous species and translocations,- introduction of microbial pathogensNutrient and organic matter enrichment- inputs of fertilizers and other nitrogen and phosphorus-rich substances (e.g. from point and diffuse sources, including agriculture, aquaculture, atmospheric deposition),- inputs of organic matter (e.g. sewers, mariculture, riverine inputs).Contamination by hazardous substances- introduction of synthetic compounds (e.g. priority substances under Directive 2000/60/EC which are relevant for the marine environment such as pesticides, antifoulants, pharmaceuticals, resulting, for example, from losses from diffuse sources, pollution by ships, atmospheric deposition and biologically active substances),- introduction of non-synthetic substances and compounds (e.g. heavy metals, hydrocarbons, resulting, for example, from pollution by ships and oil, gas and mineral exploration and exploitation, atmospheric deposition, riverine inputs),- introduction of radionuclidesSystematic and/or international release of substancesPhysical damage- abrasion (e.g. impact on the seabed of commercial fishing, boating, anchoring),- selective extraction (e.g. exploration and exploitation of living and non-living resources on seabed and subsoil).Other physical disturbance- marine litter- underwater noise |
| **Main drivers** | *The sectors/activities targeted by the measure*- Recreational activities; tourism; leisure- Industry (direct discharges or dumping, sand and gravel extraction);- Maritime energy activities (offshore oil and gas prospection and operations); - Urbanization (coastal and riverine from land – municipal waste water discharge);- Agriculture;- Activities associated with the extraction of living resources (fisheries, including fishing);- Activities related to the production of seafood (aquaculture);- Sea-based mobile activities: transport/shipping, including with - small boats) |
| **Characteristics** | * Marine and coastal birds
* Marine mammals
* Fish
* Cephalopods
* Benthic habitats
* Pelagic habitats
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| **Link to other directive/legislation/policy** | Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and floraDirective 2009/147/EC of the European Parliament and of the Councl of 30 November 2009 on the conservation of wild birdsEnvironmental Impact Assessment (EIA) DirectiveCommon Fishery Policy (CFP) |
| **Necessity for transnational regulation** | No |
| **Instrument for implementation/** **Mode of implementation** | * *Legal*
* *Technical*
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| **Spatial reference/implementation zones** | Territorial waters/EEZ, Beyond MS Marine waters |
| **Contribution of the measure to achieving the target**  | The measure will have a high contribution to achieving the targets. |
| **Transboundary impact** | The implementation of the measure is not expected to have negative effects on the marine environment of neighbouring countries |
| **Costs** | **First rough assessment:** low < 50.000 €**Phase 1:** **Update of management plans**1) Costs on creating mixed working group (WG) between Bulgaria and Romania for elaboration of management plan/s for common marine protected areas, if applicable: 3000 €. 2) Costs for conducting of Public consultation procedures for defining of such common MPAs and inforcement of management plan.6000 €3) Costs for determination of new MPAs in Bulgaria and management plans,necessary: 8000 €Total one off costs within MSFD cycle (6 years): 17.000€Scoring:

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| **Score** | **total cost** |
| 1 | > € 1 million |
| 2 | € 500.000 - 1 million |
| 3 | € 200.000 - 500.000 |
| 4 | € 50.000 - 200.000 |
| **5** | **< € 50.000** |

**Phase 2:** **Implementation of management plans:** Not possible to assess at this stage (🡪 phase 2) |
| **Effectiveness** | Strong |
| **Indicator(s) to measure effectiveness** | 1. Number of issued management plans of existing protected areas / marine protected areas / other protected areas or new ones; 2. Number of enforced management plans for existing protected areas / marine protected areas / other protected areas or new ones defined; measure doesn’t refer to new defined MPAs; 4. Improved status of protected marine species (flora and fauna) |
| **Socio-economic assessment** | Improved status of protected marine species (flora and fauna)**Cost Effectiveness Assessment:** cost effective**Cost Benefit Assessment:** low |
| **Coordination** | nationalbilateral |
| **Technical feasibility** | * Frequently applied; extensive experience / evidence of good practice
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| **Body responsible for the measure implementation** | Bulgaria: Ministry of Environment and Waters (MoEW), Black Sea Basin Directorate (BSBD), Regional Inspectorates of Environment and Water - Varna and Burgas (RIEW - Varna and RIEW Burgas), NGOs, scientific institutes, universities, laboratories, specialized in field of the marine biology and ecology Romania: Ministry of Environment, Waters and ForestsNIRD “Grigore Antipa”, NIRD GeoEcoMar |
| **Financing opportunities** | Public funds, Operational Programme "Environment" 2014-2020, Bulgaria: structural funds operated by the Ministry of Agriculture and Food, respectively National Agency of Fisheries and Aquaculture (NAFA), EU projects (i.e Horizon 2020 Program, RO-BG CBC program)  |
| **Planning of implementation/temporal coverage** | **2017** |
| **Difficulties in implementation** | No  |
| ***Supporting information for SEA*** |
| **Additional values for protection (outside MSFD)** |  |
| **Reasonable alternatives** |  |