**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.*

| **Measure characteristics** | **Management area:**   * ***Black Sea***   ***Any other codes*** | **Code:**  ***MSFD reporting code***  **No. of measure:**  **11** |
| --- | --- | --- |
| **Measure title** | Enforced control of turbot gillnets | |
| **Short, precise description of the measure** | There is an existing technical measure "Increasing the selectivity of fishing gear (minimum mesh size of bottom gillnets used to catch turbot 400 mm)" included in the Programme for Maritime Affairs and Fisheries 2014 -2020. This new measures aims to improve the control functions of the competent authorities for control of requirements established by Regulation 1380/2013 for turbot gillnets used by the fishery sector (material, mesh size, and thickness). Reference to "European Union proposal for A GFCM Recommendation" from 28 May 2015.  The measure, coordinated developed between Bulgaria and Romania, aims at improving the turbot stock and reducing by-catch (non-targeted fish and mammals) by strengthening the control mechanism on the turbot fishing techniques/tools.  The measure requires following actions:  12.1. Training of control staff  12.2. Additional staff for control  12.3. Operational control (fuel, material, boat, etc.) | |
| **EU measure category** | **2a** | |
| **Key Types of Measures** | KTM 20 Measures to prevent or control the adverse impacts of fishing and other exploitation/removal of animal and plants  KTM 35 Measures to reduce biological disturbances in the marine environment from the extraction of species, including incidental non-target catches | |
| **Environmental targets** | Descriptor 1  RO  Fish -  1.1.1 and 1.1.2 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.  Mammals  Criteria 1.1 - Species distribution, particularly indicator  1.1.1 - Distributional range  1.1.1 Maintaining the distribution and frequency of species by implementing adequate management measures  Descriptor 4  Mammals  4.3. - Abundance/distribution of key trophic groups/species  4.3.1. Reducing the by-catch levels of the toothed whales (Phocoena phocoena, Tursiops truncatus, Delphinus delphis)  Descriptor 3  Criterion 3.1. Level of pressure of the fishing activity  3.1.1 Fishing Mortality (F)  Stable trend toward decreasing values of the fishing mortality at regional level in the range FMSY=Range (F0.1-FMAX) with levels between F= 0.07 and F= 0.15 - limit reference points (turbot);  3.1.1 Fishing Mortality (F) by reduced fishing effort:  Drastic reduction in fishing effort, F ≤ FMSY = 0.15 (turbot)  Reducing fishing effort to F≤ FMSY =0.18 (dogfish)  Reducing fishing effort to F≤ FMSY =0.46 (red mullet)  Reducing fishing effort to F≤ FMSY =0.4 (whiting)  3.1.2  Maintaining the threshold value of catch/biomass ratio <= 0.033 (turbot)  Criterion 3.2. Reproductive capacity of the stock  3.2.1  Increasing the SSB for the relevant fish species at regional level (whiting (*Merlangius merlangus euxinus*), turbot (*Psetta maxima*), horse mackerel (*Trachurus mediterraneus ponticus*), anchovy (*Engraulis encrasicolus*), dogfish (*Squalus acanthias*), and red mullet (*Mullus barbatus ponticus*).  3.2.2  Recovery of the turbot stock to value of 1500-2000 tones at the Romanian littoral  Criterion 3.3. Population age and size distribution  3.3.1 Proportion of fish larger than the mean size of first sexual maturation:  Increasing the percentage of specimens older than 5 – 6 years (turbot)  Increasing the percentage of specimens larger than 120 cm (dogfish)  Increasing the percentage of specimens older than 3 years (red mullet)  Increasing the percentage of specimens older than 3 – 4 years (whiting) | |
| **Descriptors** | D1- Biodiversity  D3 – State of commercial fish and shellfish stocks  D4 – Food web | |
| **Main pressures** | Biological disturbances   * selective extraction of species, including incidental non-target catches (e.g. by commercial and recreational fishing). | |
| **Main drivers** | Fishery | |
| **Characteristics** | * Fish * Mammals * Benthic habitats | |
| **Link to other directive/legislation/policy** | Habitats Directive  Regulation (EU) No 1380/2013 of the European Parliament and the Council of 11 December 2013 on the Common Fisheries Policy. | |
| **Necessity for transnational regulation** | *No* | |
| **Instrument for implementation/** **Mode of implementation** | * Legal * Technical | |
| **Spatial reference/implementation zones** | Territorial waters/EEZ | |
| **Contribution of the measure to achieving the target** | The measure is expected to have a moderate contribution to the achieving the targets | |
| **Transboundary impact** | The implementation of the measure is not expected to have negative effects on the marine environment of other Black sea countries.  The measure will have a positive effect on increasing the turbot stocks in the long term aspect. | |
| **Costs** | **First rough assessment:** medium € 50.000 – 1.000.000  1) Training of control staff: 1000 €  2) Additional staff for control: 63.000 €  3) Operational costs for control (fuel, material, boat, ...): 70.000 €  Total one off costs within MSFD cycle (6 years): 134.000 €  Scoring:   |  |  | | --- | --- | | **Score** | **total cost** | | 1 | > € 1 million | | 2 | € 500.000 - 1 million | | 3 | € 200.000 - 500.000 | | **4** | **€ 50.000 - 200.000** | | 5 | < € 50.000 | | |
| **Effectiveness** | Strong | |
| **Indicator(s) to measure effectiveness** |  | |
| **Socio-economic assessment** | **Negative side effects:** The implementation of the measure is not expected to have negative effects on the marine environment.  **Cost Effectiveness Assessment:** Cost effective  **Cost Benefit Assessment:** low | |
| **Coordination** | local, national and bilateral | |
| **Technical feasibility** | * Applied; limited experience / uncertainties | |
| **Body responsible for the measure implementation** | **Bulgaria:** Ministry of Agriculture and Food, National Agency for Fisheries and Aquaculture (NAFA).  **Romania:** Ministry of Environment, Waters and Forests  National Agency for Fishery and Aquaculture; NIRD “Grigore Antipa”, NGO “MARE Nostrum” | |
| **Financing opportunities** | Public funds; EFF program | |
| **Planning of implementation/temporal coverage** | **2018** | |
| **Difficulties in implementation** | Yes - fishermen fear on increasing investment costs | |
| ***Supporting information for SEA*** | | |
| **Additional values for protection (outside MSFD)** |  | |
| **Reasonable alternatives** |  | |