# Factsheet for new measures under Article 13 of Marine Strategy Framework Directive 2008/56/EO

*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:**<br>- ***Black Sea*** | **Code:**<br>***BLKBG***<br><br>**No. of measure: 5** |
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| **Measure title** | Coordinated set up and / or support of regular (yearly) awareness raising campaigns addressed to business (commercials, beach concessioners, users of beach services, fishermen, etc.) and public (tourists, students, children, etc.) related to the sources and the environmental consequences of marine litter and the need for waste recycling | |

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| **Short, precise description of the measure** | This measure is developed as common (coordinated) measure with 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".<br>Problems with solid waste into marine environment have not yet found its place not only in the national legislation but also in the mind and knowledge of the people about the negative consequences of waste, which is precondition in a short - and long - term aspect existing issues and problems concerning marine liiter to be not put and solved.<br>Along with other measures foreseen in relation to marine litter, raise awareness campaigns to the business sector and the public regarding the its negative consequences on the marine environment will help to reduce them.<br>The results from studies conducted in the scope of European projects show that the largest source of solid waste polluting the Black sea are the land-based sources, followed by maritime transport and ports and recreational / tourist activities in coastal areas.<br>Unsufficient management of solid waste and its illegal dumping on the beaches or along the coast and into marine environment are the major factors for pollution.<br>Public awareness regarding the negative consequences not only for the environment, but also on human health will contribute to the reduction of solid waste end up to the environment.<br>Holding an annual awareness raising and cleaning campaigns will complement the information from regular beach monitoring.<br>The measure includes the following steps:<br>1) Capacity building events as information campaigns and seminars (children, students and wide public).<br>2) Regular (annual) campaigns for encouraging and promoting pollution prevention and beach clean-up activities on voluntary basis.<br>3) Costs for preparation of information materials (posters, brochures, etc.) and video clips for distribution through mass media. |
| **EU measure category** | *Categorisation of the measure in accordance with the "PoM Recommendations":*<br>**2a** |
| **Key Types of Measures** | *KTMs as defined in the „PoM Recommendations". Measures can be categorised in one or multiple KTMs.*<br>**KTM 29 Measures to reduce litter in the marine environment**<br>Other relevant KTM under Directive WFD 2000/60/EC:<br>KTM 19 Measures to prevent or control the adverse impacts of recreation including angling<br>KTM 21 Measures to prevent or control the input of pollution from urban areas, transport and built infrastructure |

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| **Environmental targets** | *Categorisation of the measures in accordance with the nationally defined operational environmental objectives.*<br>Pressure target<br>10.1.1. Target: Decreasing trend in the amount of marine litter washed ashore and/or deposited on coastlines.<br><br>10.1.2. Target: Decreasing trend in the amount of marine litter floating on the water surface, in the water column and deposed on the seafloor.<br>Regarding criterion 10.1, indicator 10.1.3 "Trends in the amount, distribution and, where it can be established - the composition of the microparticles (in particular plastic microparticles), defining environmental target will be made conducting a preliminary study of the content and trends in the accumulation of micro particles in biota and after gathering enough data will be updated.<br><br>Regarding criterion 10.2, indicator 10.2.1 indicator "Trends in the amount and composition of waste consumed by marine animals (an analysis of stomach contents), defining environmental target will be done carrying out a preliminary study on the content and trends in the accumulation of microparticles in biota and after gathering enough data. |
| **Descriptors** | *Categorisation of the measures to the descriptors in lined with Annex 1 MSFD. The descriptors are identified by their short form:*<br>**D10 – Marine litter** |
| **Main pressures** | - *Using the analysis carried out in 2012 as a basis, categorisation of the measures in accordance with the pressures defined in Annex 3 MSFD, Table 2:*<br><br>- **Other physical disturbance/Marine litter** |
| **Main drivers** | *The sectors/activities targeted by the measure*<br>• Shipping<br>• Fishery (including lost or abounded fishing gears)<br>• Energy production (offshore platforms)<br>• Port operations<br>• Setting and operations of submarine cable and pipeline operations<br>• Industry (discharges, emissions)<br>• Urban (municipal water discharges from sewerages)<br>• Riverine flows, flows from rain and drainage collectors, surface flows.<br>• Artificial structures (including constructions)<br>• Waste disposal (including dredging materials)<br>• Coastal human activities (ex. tourism, recreation, sports and eco-tourism)<br>• Littering of beaches, coastal urban areas<br>• Transboundary transportaton of floating solid waste |

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| **Characteristics** | *Using the analysis carried out in 2012 as a basis, categorisation of the measures in accordance with the characteristics defined in the "PoM Recommendations":*<br>- Marine and coastal birds<br>- Marine mammals<br>- Fish<br>- Benthic habitats<br>- Pelagic habitats |
| **Link to other directive/legislation/ policy** | *Aligning objectives with other legal commitments*<br>Waste Framework Directive 2008/9/EC;<br>Urban Waste Water Directive 91/27/EEC;<br>Bathing Directive 2006 /7/ EC)<br>Convention for the Protection of the Black Sea Against Pollution and the Protocol on the protection of the Black sea environment against pollution by dumping<br>Protocol on the Protection of the Marine Environment of the Black Sea from Land-Based Sources and Activities (2009)<br>Protocol on cooperation in combating pollution of the Black sea marine environment by oil and other harmful substances in emergency situations |
| **Necessity for transnational regulation**<br>**Необходимост от транснационално регулиране** | *Information as regarding the necessity for regulations at EU, regional and international level to achieve MSFD environmental objectives.*<br>At this stage, there is no necessity of changes of transnational regulations at national level. Necessity of transnational framework for Black sea marine region at regional level is described in planned common (joint) measure 3, between Bulgaria and Romania "Development of Regional Marine Litter Action Plan (joint methodology for quantifying the marine litter, identification of sources, prosecution of offenders, etc.)". |
| **Mode of implementation** | *Stating the implementation process in line with the „PoM Recommendations"; multiple options possible:*<br>• Technical<br>• Political |
| **Implementation zones** | *i.e. the spatial impact of the measure: MS land/FW, WFD TW, WFD CW, Territorial waters, EEZ, CS (beyond EEZ), Beyond MS waters*<br>*MS land/FW*, Coastal waters (WFD CW) |

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| **Contribution of the measure to achieving the target** | – *using technical information*<br><br>**Negative side effects:**<br>The implementation of the measure is not expected to have negative effects on the marine environment. Instead of this, implementation of the measure will have positive results.<br><br>**Benefit:**<br>Raising public awareness will lead less introduction of marine litter on the coast and into marine environment and with direct effect for achieving the environmental targets under Descriptor 10 – marine litter (please, see the section "Environmental targets" above).<br>In addition the measure will lead to a reduction of marine litter by beach cleaning campaings - direct effect on its quantity.<br>Relatively, the measure is expected to have indirect effect on achieving / maintenance of GES under Descriptor 1 – Biodiversity (seabed habitats, fish, marine mammals and birds) by reducing the cases of ingestion, entanglement and seabed habitat loss due to from the accumulation of waste, etc. Raising public awareness is a preventive activity that will reduce pollution by solid waste in the long - term period.<br>The measure is expected to have **medium** contribution to achieving the targets under Descriptor 10 - Marine litter. |
| **Transboundary impact** | *Information on the impact of the measures on transboundary neighbours*<br>The implementation of the measure is not expected to have negative effects on the marine environment of neighbours. Instead of this, implementation of the measure will have positive results.<br><br>Не се очаква мярката да окаже негативни ефекти върху морската околна среда на съседните страни. Дори напротив, очаква се положителен ефект от нейното прилагане. |
| **Costs** | **First rough assessment**: **low** < € 50.000<br>1) Capacity building events: Coordinating and setting up events: 3000 €<br>2) Regular (annual) campaigns for encouraging and promoting pollution prevention and beach clean-up activities on voluntary basis (it includes organization of campaigns (transport for volunteers, gloves and bags to ensure transportation of collected waste to regional / municipal landfills): 12.000 €<br>3) Costs for preparation of information materials (posters, brochures, etc.) and video clips for distribution through mass media.<br><br>**Total one off costs within MSFD cycle (6 years): 15.000 €** |

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| **Effectiveness** | *Effectiveness of the measure in reaching targets (either qualitative description, or according to indicators: indicators for environmental targets and for GES, proposal for statistical indicators in support of Art. 18 interim reports*<br><br>The measure is directly linked to the achievement of GES as it will lead to a reduction of marine litter by reducing waste disposal out of the regulated places and cleaning of beaches and the coast through campaigns - direct effect on their quantity. Raising public awareness is a preventive activity that will reduce pollution by solid waste in the long - term period.<br>The measure is expected to have **medium effectiveness** for achieving the environmental targets under Descriptor 10 - Marine litter. |
| **Indicator(s) to measure effectiveness** | *Should be based on existing indicators.*<br>1. Number of conducted information meetings per year.<br>2. Number of distributed brochures and materials on a theme "Marine litter".<br>3. Number of conducted cleaning campaigns per year.<br>4. Amount of collected waste under each campaign and trends in medium and long term period. |
| **Socio-economic assessment** | ***Cost Effectiveness Assessment*: Cost effective**<br>***Cost Benefit Assessment*: medium**<br><br>The measure is expected to have **low to medium** effectiveness for achieving the environmental targets under Descriptor 10 - Marine litter.<br>At the same time, **public costs for the implementation of the measure are also low** (cleaning campaigns will be on a voluntary basis).<br>Therefore, the cost-effectiveness of the measure, comparing costs of potential benefits in terms of overall objectives of the MSFD could be determined as **medium to high** in the mid - and long - term period.<br>At this stage no quantitative assessment of the cost-effectiveness could be described, because there is not enough data for the quantitative benefits of the measure. |
| **Coordination level** | *Selection of the governance level that will coordination the implementation of the measures, i.e. Local, Sub-national, National, Bilateral, Sub-regional, Regional, EU level, International*<br><br>local level<br>national level<br>bilateral level |
| **Technical feasibility** | *Options:*<br>• *Frequently applied; extensive experience / evidence of good practice* |

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| **Body responsible for the measure implementation** | 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, school's administrations, Universities, beach concessioners, regional state administrations an municipalities |
| **Financing opportunities** | *Including EU-cofinancing*<br>Public and private funds, EU projects (i.e RO-BG CBC Program, Horizon 2020 Program, European Maritime and Fisheries Fund (EMFF) |
| **Temporal coverage** | **Starting: 2017**<br>**Ending: 2021** |
| **Difficulties in implementation** | *Provide information on the potential challenges that could likely faced in implementation.* |