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:** - ***Black Sea***	**Code:** ***BLKBG…..*** **No. of measure: 21**
Measure title	Mainstream marine litter into existing legislation	
Short, precise description of the measure	In Bulgaria, EU and international law governing litter and waste has been transposed into national legislation. However, litter is still a problem in inland and marine waters, indicating gaps in legislation and/or enforcement problems. Marine litter is not included in the national regulatory framework, although Bulgaria has certain obligations with respect to them under Descriptor 10 of the MSFD (Directive 2008/56/EO). The MFSD is transposed into national legislation by the Regulation on the protection of the environment in marine waters, approved by Ministerial Decree № 273 from 23.11.2010. It is necessary to carry out a comprehensive analysis of gaps in existing legislation and its enforcement, and, based on that analysis, make amendments to the national legislation to ensure the implementation and the overall objectives of MSFD, as well as reach the environmental targets for achieving of Good Environmental Status (GES) in the marine environment under Descriptor 10 - Marine litter. Gaps initially found are: - A definition of "marine litter" is missing in the national legislation. - Specific provisions relating to the control and management of waste already introduced into the inland and marine environment is missing. There is no sufficient control and enforcement of waste legislation or penalties on littering, especially on beaches. The main laws that need to be reviewed are the Waste Management Act, the Water Act, the Environmental Protection Act, the Act on the Black sea coast spatial development and the “Law of the maritime spaces, inland waterways and ports” of the Republic of Bulgaria and their relevant regulations.	

	<u>The implementation of the measure includes the following activities:</u> 1. Analyze the gaps in current legislation in terms of the MSFD targets set up on marine litter, including results of such analyses from on-going and completed projects. 2. Prepare proposals for regulatory changes, as well as regular meetings with the competent authorities to discuss the results and proposals. 3. Prepare institutional analysis for current opportunities and the need to ensure implementation of the proposed legislative amendments. 4. Carry out procedures for amending the regulations. 5. Ensure that amendments to national legislation are adequately enforced (e.g. higher fees, more controls). For example, regarding beach litter, this measure could be executed through strengthening the polluter-pays-principle by imposing stricter bans and penalties on littering on beaches; by tightening the obligations of contractors of beach cleaning activities; and by strengthening the necessary control and enforcement activities. **Example on the implementation this measure:** The most common waste on the beaches are different type of plastic bags and pieces, bottles and pieces of them > 50 < cm, caps and rings, cigarette butts and filters, polystyrene pieces 2,5 > < 50 cm, and fast food packing. Although there are existing regulations on cleaning beaches, there is still a low level of execution of control and clean-up. **Solution:** To achieve a reduction in waste, especially artificial plastic beach / coastal litter, it is necessary to introduce more stringent regulatory requirements for concessionaires and users of the beaches (legal and natural persons). This will be done through planning and implementation of further legislative actions to strengthen the control by the competent authorities to: 1. Firms – contractors of beach concessions on beach cleaning activities to reduce the accumulation of waste on beaches and its introduction into marine environment. 2. Individuals, users of the beach services. **<u>Possible steps to the guarded and unguarded beaches:</u>** - increasing the number of control inspections on the beaches under concession during the summer. - stricter penalties and increasing their size in case of offences by concessioners (throwing out waste improperly, creating preconditions for pollution of the beach and the coastal waters and a health risk to beach users). - stricter penalties and increasing their size in case of offences by individuals (throwing out waste improperly, creating preconditions for pollution of the beach and the coastal waters and a health risk to beach users). - organization of seasonal campaigns for cleaning each year at unguarded beaches by an Order of Minister of Regional Development and Public Works. The last action could be implemented in the frame of the planned transboundary measure „Annual awareness raising campaigns adressed to

	business (commercial, beach users, 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“. Voluntary beach cleaning activities **are very effective** in removing marine litter from the environment but **limited in scale** in comparison to the scale of the problem.
EU measure category	*Categorisation of the measure in accordance with the “PoM Recommendations”:* **2a**
Key Types of Measures	*KTMs as defined in the „PoM Recommendations“. Measures can be categorised in one or multiple KTMs.* **KTM 29 Measures to reduce litter in the marine environment**
Environmental targets	*Categorisation of the measures in accordance with the nationally defined operational environmental objectives.* Pressure target 10.1.1. Target: Decreasing trend in the amount of marine litter washed ashore and/or deposited on coastlines. 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. Regarding micro particles (criterion 10.1, indicator 10.1.3) and composition of waste consumed by marine animals (criterion 10.2, indicator 10.2), environmental targets and indicators will be established after sufficient data is available.
Descriptors	*Categorisation of the measures to the descriptors in line with Annex 1 MSFD. The descriptors are identified by their short form:* **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:* **Other physical disturbance/Marine litter**
Main drivers	*The sectors/activities targeted by the measure* • Coastal human activities (e.g. tourism, recreation, sports and eco-tourism) • Activities extracting biological resources (fisheries including

	recreational, maerl, seaweed) • Sea-based mobile activities (shipping) • Waste disposal (dredging) Other drivers are covered by WFD-related measures: • Activities producing seafood (aquaculture) - information on planned activities and measures to reduce pollution from waste. • Activities with permanent infrastructure (e.g. ports) or structural changes (such as coastal protection) - information on planned activities and measures to reduce pollution from waste water areas of ports. • Land-based activities (e.g. urbanization, industry, agriculture) - information on planned activities and measures to reduce pollution from waste. • Крайбрежни човешки дейности (напр. туризъм, отдих, спорт и екологичен туризъм) • Морски-базирани мобилни дейности (корабоплаване) • Извличане на живите ресурси (в областта на рибарството) • Депониране на отпадъци (драгажни маси)
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":* - Marine and coastal birds - Marine mammals - Fish - Benthic habitats
Link to other directive/legislation/ policy	*Aligning objectives with other legal commitments* Waste Framework Directive (Directive 2008/9/EC), Directive on Port Reception Facilities (Directive 2000/59/EC) , Urban Waste Water Directive (Directive 91/27/EEC), Directive on ship-source pollutions (Directive 2009/123/EC), Bathing Directive (Directive 2006/7/EC) Convention for the Protection of the Black Sea Against Pollution and International Commission for protection of Danube river (ICPDR) National legislation: Water Act, Waste Management Act, Environmental Protection Act, Act on the Black sea coast spatial development, Law of the maritime spaces, inland waterways and ports of the Republic of Bulgaria and their relevant regulations. More important regulations related to MSFD are Regulation № 15 / 28.09.2004 for the transmission and reception of waste - result of shipping activity and cargo residues and Regulation № 2 07.23.2014 on the classification of waste and other waste-related regulations. This measure is closely linked to the measures set out in the first RBMPs (especially the RBMPs of the Black Sea River Basin District and of the

	Danube River Basin District) to close coastal settlement dumps and illegal dumps and to construct regional landfills with efficient systems for the subsequent processing including recycling. The measure is related to the effective implementation of measures in neighboring countries, in particular laid down in their RBMPs and the measures to the International Commission for the Protection of Danube River (ICPDR) with aim to limit the transboundary movement of riverine waste. The implementation of measures under the WFD 2000/60/EC will contribute to reducing the number of land-based sources and routes of waste entry into the marine environment (small landfills, illegal dumps, landfills located close to the Black sea coast or rivers flowing into the Black Sea). Also, this measure is related to the following measures for the protection of coastal waters included in the Program of measures to 2nd Black sea RBMP (WFD key type of measures (KTM) 21): - Conducting annual campaigns (spring and autumn) to clean river mouths. - Provision of waste containers and regular garbage transportation from the areas of fishing villages on the territory of the coastal municipalities. - Implementation of the control of waste management in fishing villages in coastal municipalities. - Collection of information for and mapping of illegal dumps in coastal municipalities (inc. sending signals to relevant authorities, inspections and their cleaning up). - Cleaning and removing illegal dumps along the Bulgarian coast (annually, with a frequency of at least 1 time in the coastal zone up to 2 km inland, beyond the beaches.
Necessity for transnational regulation	*Information as regarding the necessity for regulations at EU, regional and international level to achieve MSFD environmental objectives.* Yes, a transnational approach is needed and to be tackled under the frame of the BSC (Marine Litter Action Plan).
Mode of implementation	*Stating the implementation process in line with the „PoM Recommendations"; multiple options possible:* • Legislative
Implementation zones	*i.e. the spatial impact of the measure: MS land / FW, WFD TW, WFD CW, Territorial waters, EEZ* MS/land, WFD CW, Territorial waters EEZ of Republic of Bulgaria
Contribution of the measure to achieving the target	The measure "Mainstream marine litter into existing legislation" aims at improving the status of the marine environment for the Descriptor 10 "Marine Litter". To achieve this, the measure will target sources of marine litter through adapting the respective legislation and regulations.

	The review and adaptation of the respective regulations will help to reach the environmental targets (decreasing trends in marine litter washed ashore, floating on the surface and being deposited on the seafloor), but to which degree cannot be estimated at the present time, as it very much depends on the level of enforcement and also on parallel processes on the international level. Once the monitoring program on marine litter is developed and implemented, more information on the gap to be closed will be available. The international level is especially important, as the amount of marine litter washed ashore, floating on the surface and being deposited on the seafloor also depends on regulation, enforcement and control in the other Black Sea countries. Although comprehensive data is not available, existing studies suggest that land-based sources are the most important source of marine litter in the Black Sea, which itself would reduce minor the measure's contribution to achieving the targets[1]. The parallel process of raising awareness is an important step to prevent the entry of marine litter and is a way to help achieving the environmental targets. However, raising awareness is generally less effective measure than other measures, such as regulatory or economic (e.g. fees for using of plastic bags, etc.), so its contribution for achieving the targets is lower. In summary, **the contribution of the measure** "Mainstream marine litter into existing legislation" to reach the **targets is probably medium**, with a potential of being **very effective** (through well-designed and enforced regulations).
Transboundary impact	*Information on the impact of the measures on transboundary neighbours* The implementation of the measure is not expected to have negative transboundary impact on the waters of other countries shared the Black sea marine region.

[1] For an overview, see Görlitz/Interwies/Werner et. al 2013 (available at: http://marine-litter-conference-berlin.info/userfiles/file/Issue%20Paper_Final%20Version.pdf)

Costs	Public costs: 1) Review and proposals for amending the national legislation (tender procedure, costs for contracting). 2) Amendment of national legislation (costs for expert drafting meetings). 3) Costs for enforcement/controls (incl. increasing the number of control persons /inspectors). Private costs: In case private companies are obliged to implement measures (or do it voluntarily) due to the changes in legislation, the costs will also be paid by the private sector (example: providing a sufficient number of containers for waste collecting on the beaches, costs of waste transportation). In summary, the costs of the measure are estimated to be **medium to high** (50.000 - 1 million €), depending on the level and type of enforcement realized.
Effectiveness	The measure "Mainstream marine litter into existing legislation" aims at improving the status of the marine environment for the descriptor 10 "Marine Litter" and indirectly D 1, 3, 4. To achieve this, the measure will target sources of marine litter through adapting the respective legislation. For example, regarding beach litter, this measure could be executed through strengthening the polluter-pays-principle by imposing stricter bans and penalties on littering on beaches; by tightening the obligations of contractors of beach cleaning activities; and by strengthening the necessary control and enforcement activities. The review and adaptation of the respective national regulations, is **potentially very effective** in reducing the amounts of marine litter washed ashore, floating on the surface and being deposited on the seafloor: it has been proven in other countries that regulatory (prohibitions, fines for littering) and economic (e.g. fees for plastic bag use) legislative measures can reduce the amounts of (marine) litter being deposited into the environment significantly. However, the effectiveness of regulatory measures **strongly depends on enforcement and control**. To conclude, the **overall effectiveness of the measure** "Mainstream marine litter into existing legislation" is estimated to be of **medium level, with a potential of very high effectiveness** in the case of strong regulatory and economic legislative changes accompanied by the necessary control and enforcement activities.
Indicator(s) to measure	Indicator: Amounts of marine litter (number of items, volume, and/or composition[2])

[2] "Composition" would be very relevant, since the "number of items" (and resulting percentages regarding most prevalent marine litter types) do not necessarily reflect the importance of the items in terms of impacts); see OSPAR Pilot Project on Monitoring Marine Beach Litter (2007) (http://qsr2010.ospar.org/media/assessments/p00306_Litter_Report.pdf).

effectiveness	a) on the shore/beaches; b) in the water column; c) on the water surface; d) on the seafloor. Indicator: Trends in the amount, distribution and, where it can be established, the composition of the micro-particles (in particular plastic micro particles), according to the environmental targets (development in process[3]). Indicator: Trends in the amount and composition of waste consumed by marine animals (an analysis of stomach contents), according to the environmental targets (development in process[3]). Indicator: Establishment of an inter-ministerial technical working group supporting the work on Descriptor 10. Indicator: Number of meetings to discuss changes to legislative documents regarding the prevention and management of waste entering into the marine environment. Indicator: Number of amended legislative documents.
Socio-economic assessment	The measure "Mainstream marine litter into existing legislation" has a **low-medium effectiveness** in reaching MSFD objectives/environmental targets (with a high level of uncertainty, depending on the level of controls and enforcement activities accompanying the regulatory changes). At the same time, the public **costs of the measure are also medium high** (depending on the type and level of controls and of enforcement realized). Hence, the **cost-effectiveness of the measure**, i. e. comparing costs with potential benefits in terms of reaching MSFD objectives, can be described as being of **medium to high level**. Unfortunately, no quantitative assessment of the cost-effectiveness could be conducted, as especially the information on the benefits (in a quantified form) is not available. Additional socio-economic effects of the measure are: - in the short term, public revenues through higher fees could be increased (and such income could potentially be earmarked for cleaning activities or awareness raising); - the implementation of the measure is not expected to have negative effects on the marine environment; - depending on the type of regulatory changes, some costs may occur to the private sector or on individuals (example: providing a sufficient number of containers for waste collecting on the beaches, costs of waste transportation); - less litter in the marine environment has other socio-economic benefits, such as reducing the costs for beach cleaning activities; reducing the direct costs of marine litter to the fishery sector (through loss of fish stocks due to ghost fishing, spoiled catches through contamination with debris, paint and oil, damage to nets and to propellers, entangled in litter, resulting in lost operating time and time spent cleaning nets); and improving the livelihood and health of local coastal communities.

[3] Study to gather data, define the environmental target and determine potential threshold values is ongoing.

Coordination level	*Selection of the governance level that will coordinate the implementation of the measures, i.e. local, sub-national, national, bilateral, sub-regional, regional, EU-level, international* at national level на национално ниво
Technical feasibility	*Options:* • Frequently applied; extensive experience / evidence of good practice
Body responsible for the measure implementation	Ministry of Environment and Waters (MoEW).
Financing opportunities	State budget. Pilot projects (if necessary): LIFE programme
Temporal coverage	**Starting time: 2017** **Ending time: 2019**
Difficulties in implementation	Provide information on the potential challenges that could likely faced in implementation. Difficulties in the coordination process between involved competent authorities for amending the legislation.