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## **ANALYSES SUMMIRIZING REALIZED SURVEY IN BULGARIA, DISTRICT BURGAS**

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## I. Background information: general information for the scope of survey and the target area

**The Black Sea** is a natural inland water basin situated between Europe and Asia. Six countries share the Black Sea coast: Bulgaria, Georgia, Romania, Russia, Turkey and Ukraine. The lengths of their respective coastlines are: Bulgaria - 354 km, Georgia 310-km, Romania 225 km, Russia - 800 km (including the Azov Sea), Turkey - 1329 km and Ukraine - 2782 km (including the Azov Sea). A population of about 16 million people inhabits the coastal zones of the six countries.

The following are some of the basic geographical characteristics of the Black Sea: total area 422 000 sq km (441 000 sq km including the shallow Azov Sea), maximum depth — 2212 m, average depth 1300 m, volume 540 000 cubic km, wave height up to 6 — 7 m, wave length up to 90 — 100 m, tidal variations — 3 to 10 cm, average winter temperature of seawater - 4°C, average summer temperature of seawater — 22—24°C. The largest bays on the Black Sea are the Karkinitiski, the Bourgas, the Kalamitski, the Dnieprovski, the Dniestrovski, the Sinop and the Samsun Bay. The largest rivers flowing into the Black Sea are the Danube, the Dnieper, the Don, the Dniester, the Kuban, the Southern Bug, the Rioni, the Kizil—Irmak and the Kamchia rivers.

The Black Sea with its total area of roughly one third the size of continental Europe is one of the largest inland water basins in the world. It is almost entirely isolated from the world's oceans but is over 2 km deep in places and receives river inputs from a large catchment territory, including major parts from seventeen countries and the second, third and fourth largest rivers in Europe, respectively the Danube, the Dnieper and the Don.

The Black Sea is connected to the Mediterranean only through the narrow and winding Bosphorus Straits, a 35-km natural channel, as little as 40 m deep and 700 m wide in places. It leads to the Sea of Marmara and then to the Aegean Sea through the Dardanelles. This complex natural system makes the replenishment of seawater in the Black Sea very slow.

Every year the rivers pour an average of 350 cubic km of water into the sea and since it receives more fresh water than it loses from evaporation, the average salinity is quite low 18‰. The surface outflow, a mixture of seawater and fresh water, from the Black Sea to the Aegean amounts to about 610 cubic km annually. To compensate for this loss of water, the Black Sea receives an inflow from the Mediterranean with higher salinity but the volume is roughly twice smaller. It enters the sea as an underflow through the Bosphorus, which also carries the outflow. The two do not mix very easily and as a result the Black Sea has got a surface layer about one hundred metres deep which contains more fresh water than the waters below.

**Bulgaria** covers an area of 110,370 km<sup>2</sup>. Bulgaria has a great variety of topographical features, mostly mountains with lowlands in north and southeast, but also plains, plateaus, basins, gorges, and deep river valleys. The position of BG is characterised of the strategic interesting location to Turkey with controlling key land routes from Europe to the Middle East and Asia.



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Population (1 000): 7,101,859 inhabitants (2017) GDP at market prices: 50,430.1 million Euros (2017) GDP per inhabitant in PPS (Purchasing Power Standard EU 28 = 100): 49 (2016) GDP growth rate: 3.6% (2017) Inflation rate: -1.2% (2017) Unemployment rate: 6.2% (2017) General government gross debt (Percentage of GDP): 25.4% (2017) General government deficit/surplus (Percentage of GDP): 0.9% (2017) Capital city: Sofia Official EU language: Bulgarian Currency: BGN Source: Eurostat (last update: 20 December 2017)

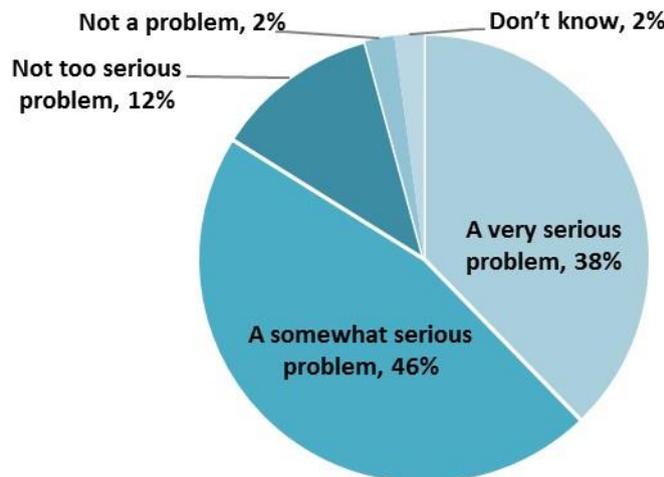


In Bulgaria the population is unevenly distributed across the country. About 71 % of the population was living in urban areas Sofia, which is the largest city and capital of Bulgaria (1.236 million in 2017).<sup>1</sup>

### Awareness of the climate change among the Bulgarian society

According to Global Climate Change<sup>ii</sup> survey held by World Bank 38% from Bulgarians considered climate change a very serious problem and 46% considered climate change a

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"In your view, is climate change a very serious problem, somewhat serious, not too serious, or not a problem in your country?" (Respondents chose from a list.)  
somewhat serious problem.

The Black Sea Basin Management Area in Bulgaria covers 16567.93 km<sup>2</sup> of land territory and 6,358 km of aquatory or 14.9% of the country's territory and 100% of the Black Sea aquatory. To the west it borders the Danube basin district and the East Aegean basin district, to the north with the Republic of Romania, to the south with the Republic of Turkey. 12 nautical miles of the Black Sea is 27 000 km<sup>2</sup> - against the coast from Cape Sivriburun north to south Mutludere with a total length of 378 km.

Common borders. Common solutions.



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The Black Sea Basin Directorate region perform planning, monitoring, informational features, and management of water, exclusive state ownership.

**Basin Directorate for Water Management in the Black Sea Region** - was established by the Minister of Environment and Water in 2002, in accordance with Directive 60/2000 of the European Union and national legislation and regional division of the Ministry.

The Black sea basin Management area included three Black Sea districts - Dobrich, Varna and Bourgas. Taken together, they generate 13.1% of the Gross Value Added (GVA) and Gross Domestic Product (GDP) on a national scale.

Approximately 80% of the area and 90% of the population of the three areas fall within the Black Sea basin district.

**Burgas Province (district)** is a province in southeastern Bulgaria, including southern Bulgarian Black Sea Coast. It is bounded on the south by Turkey. The province is named after its administrative and industrial centre - the city of Burgas - the fourth biggest town in the country. It is the largest province by area, embracing a territory of 7,748.1 km<sup>2</sup> that is divided into 13 municipalities with a total population, as of December 2017, of 411579 inhabitants.

## **II. Analysis on legislation concerning marine litter in Bulgaria. List of laws with focus on environmental protection sector with the focus on waste management, water management in Bulgaria**

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### **Word and EU policies and legal framework**

The legal framework for regional cooperation was elaborated after the 1972 Stockholm Conference on Environment and Development. In the early 1990s representatives of the six Black Sea countries drafted their own Convention for the Protection of the Black Sea against Pollution, signed in Bucharest in 1992 and ratified by the six national assemblies by early 1994. The Bucharest Convention, includes a general framework of agreement and three specific protocols: on the control of land-based sources of pollution, on the dumping of waste and on joint action in the case of accidents, such as oil spills. The implementation of the Convention is overseen by a Commission with a permanent Secretariat based in Istanbul, hence the Istanbul Commission.

Another important step in the regional process was the **Ministerial Declaration on the Protection of the Black Sea Environment**, signed by the six environmental ministers in Odessa in 1993. Shortly after, the countries requested support to develop a long-term Action Plan. With \$ 9.3 million in funding provided by the Global Environmental Facility (GEF) and collateral international donors, the Black Sea Environmental Programme (BSEP) was launched in 1993. BSEP successfully provided the missing link between experts on Black Sea and environmental issues in the separate countries. One of the basic problems was the provision of reliable information on the state of the environment itself. Such information is vital for the improvement of environmental policy and for long-term policy development and actions, including investments. BSEP established an operating



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network of 40 institutions in the Black Sea region, which assisted the coastal states and the NGO community in developing regional-based action plans and capacities for better managing the Black Sea environment.

BSEP has invested heavily into recruiting experts and improving the pollution monitoring network. The working parties prepared national and regional thematic reports presenting the available information and analysis to scientists, managers and policy makers. The Transboundary Diagnostic Analysis (TDA) carried out under the GEF project, led to development of the Black Sea Strategic Action Plan (BS-SAP) adopted by the six coastal states in Istanbul in 1996. Both documents explain causes for the environmental crisis of the sea and suggest solutions.

In June 2002, the BS-SAP was revised by the six countries, which reconfirmed their commitment to the original document. Currently the UNDP-GEF Black Sea Ecosystem Recovery Project (2002-2004) is underway, addressing basin wide eutrophication issues through reform of agricultural policies, improved municipal and industrial wastewater treatment, rehabilitation of key basin ecosystems and strengthening the legislative framework.

- Roadmap of Resource Efficient in Europe<sup>iii</sup>
- General Union Environment Action Programme to 2020 “Living well, within the limits of our planet”<sup>iv</sup>
- Green Paper on a European Strategy on plastic waste in the environment<sup>v</sup>
- Europe 2020: National Reform Programme 2012-2020 and the Council Recommendation on the National Reform Programme 4
- Methodological guidance note of European Commission, Environment DG: „Preparing a Waste Management Plan“, 2012
- Methodology for strategic planning in Republic of Bulgaria, April 2010, Council for Administrative Reform<sup>vi</sup>
- The approach of NWMP developing is consistent with the requirement such a document to be easily understandable by non-specialists and the general public and also to provide an opportunity for narrow specialists to gain more detailed information by annexes to the main text of the analytical part.

### **Implementation of international agreements and commitments**

Bulgaria became party to the vast majority of global and regional **multilateral environmental agreements (MEAs)** prior to its accession to the EU in 2007. After 2007 the country became party to very few agreements, including the 2003 Protocol on Pollutant Release and Transfer Registers, in 2010; and the 2010 Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization and the 2015 Paris Agreement, in 2016.



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Implementation of MEAs is a priority for the Ministry of Environment and Water and other governmental institutions. Good efforts are applied and clear criteria for prioritization of meetings exist to ensure the participation of Bulgaria in all important meetings under MEAs, given financial constraints. National implementation reports are generally submitted on time and focal points are appointed for all MEAs to which the country is a party.

The implementation and compliance cases against Bulgaria in various MEAs indicate some systemic issues with MEA implementation, e.g. for biodiversity treaties, such an issue is the rapid development of wind energy in the absence of strong nature protection legislation. Bulgaria ensures public participation in the development of the Bulgarian position for decision-making in the framework of MEAs and in implementation of MEAs. Consultations with NGOs have been organized prior to and after important MEA meetings, representatives of NGOs have been included in national delegations to MEA meetings. In many cases, draft national reports are published with an invitation to the public to submit comments. However, in general there is no systematic policy on how to involve the public and NGOs in development of the Bulgarian position for decision-making in the framework of MEAs and in implementation of MEAs.

### **Waste management**

The total amount of municipal waste generated decreased from close to 5 million tons in 2000 to slightly more than 3 million tons in 2016. The amount of waste generated per capita decreased accordingly, from more than 600 to 442 kg/capita/year. The number of settlements and inhabitants served by collection services increased substantially. Nowadays, 99.6 per cent of the population is covered with waste services.

The formal system of separate collection of packaging waste was introduced in Bulgaria in 2004. At that time, only slightly more than one third of the generated packaging waste was recycled, and by 2014 this proportion had reached 61.7 per cent.

Bulgarian policy on organic waste is to reduce landfilling, especially of biodegradable organic waste. Construction of regional sanitary landfills is the first step to reducing the environmental burden of such waste (preventing contamination of the soil and groundwater and reducing methane emissions). Bulgaria has a target to reduce biodegradable waste on landfills to 35 per cent of the total quantity of organic waste generated in 1995 until 2020. The Ministry of Environment and Water has set a target of 25 per cent separate collection of municipal biowaste in 2016, 50 per cent in 2020 and 75 per cent in 2025.

The fourth National Waste Management Plan for the period 2014–2020 aims at discontinuing the link between economic growth and waste by preventing the generation of waste and by setting specific quantitative targets for preparation of reuse, recycling and other forms of recovery for specific wastes.<sup>vii</sup>

### **Environmental Policies in Bulgaria**

With a positive but cautious climate policy, Bulgaria falls into the upper-middle ranks internationally (rank 15) with regard to environmental policies. Its score in this area has improved by 0.1 point relative to its 2014 level.

Climate policy is mostly focused on a relatively rapid increase in the share of renewables and the elimination of high-carbon-emitting fuel sources. Per-capita CO<sub>2</sub> emissions are relatively low.



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The country lacks a coherent water-resources strategy, with management largely controlled by municipalities. Forest and biodiversity protection are strengths. Conservation-focused groups are more influential than many other civil-society associations, although business interests continue to violate environmental policies, particularly in the mining and tourism sectors.

Bulgaria is relatively passive with regard to international environmental policies, but is in the group of East-Central European countries that have expressed caution regarding aggressive carbon targets.

Since 2007, Bulgaria has strengthened its policy framework for integration of environmental concerns with social and economic concerns. The country adopted the National Development Programme Bulgaria 2020 (NDP BG 2020), the National Reform Programme and the Government Programme for Stable Development for the period 2014–2018.

Bulgaria has continuously strengthened its legal framework to promote its transition towards a green economy. The NDP BG 2020, the National Reform Programme and the Government Programme for Stable Development provide, to some degree, long-term strategic guidance for the transition towards a green economy in Bulgaria.

### **Strategic and programme documents in Bulgaria**

- **National Waste Management Plan 2014-2020**

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Bulgaria has developed a National waste prevention programme (NWPP) in accordance with the requirements of the WFD and Article 50 of the Waste Management Act for the first time. NWPP is an integral part of NWMP and identifies measures for implementation of the highest level in the waste management hierarchy.

The fourth NWMP is the transition from waste management to the efficient use of waste as resources and sustainable development by prevention of their generation, as far as possible. Successful implementation of the plan will lead to the prevention and reduction of the harmful effects of waste on the environment and human health and reduce the use of primary natural resources.

The plan supports the central and local authorities to concentrate limited financial resources from national and EU sources on priority projects in the field of waste management.

- **National waste prevention programme**

#### **Included next sub-programmes:**

Programme to achieve the objectives for preparing of re-use and recycle of municipal paper, metal, plastic and glass waste

Programme to achieve the objectives of biodegradable waste, including bio-waste

Programme to achieve the targets for recycling and recovery of construction and demolition waste

Programme to achieve the targets for recycling and recovery of widespread waste



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Programme to improve the management hierarchy of other waste streams and reduce the risk to the environment from landfills for municipal waste

Programme to improve the capacity of institutions for waste management

Programme to improve the quality of information helping to make informed management decisions

Programme to improve awareness and participation of the population and business in waste management activities

Coordination with other plans and programs

## Short analyses of the existing legislation in Bulgaria

### Institutions

**The Ministry of Environment and Water (MOEW)** is responsible for the development and implementation and drafting of the national waste management policy as well as regulation of the activities in the public and private sectors. The MOEW performs some of the activities by the Executive Environmental Agency (EEA) and a network of 16 Regional Inspectorates of Environment and Water (RIEW) that are specialized control bodies of the Ministry and control the implementation of the waste management activities on their territories.

Inspectorates ensure that the 58 waste management regions, set by the National Waste Management Program (2009- 2013) under their supervision comply with environmental standards. However, limited enforcement capacity of the Inspectorates will make closing all of about 200 non-compliant dump sites challenging.

Municipalities (264 in total) play an important role in the implementation of the policy in the environmental sector. Municipalities are organised in Regional Municipal Associations, which are responsible to implement the national waste management policy on the regional level.

Under the new mechanism for development of the waste management infrastructure with the support of the Operational Programme Environment, which was introduced in 2009, the funds for regional investments in the regional systems are now being allocated by central level decision making.

**The Environmental Protection Act** establishes the general regulatory framework for SEA. The SEA Ordinance further specifies the SEA system.

Bulgaria has established a single environmental ex-ante quality assurance system by integrating Natura 2000-appropriate assessment procedures, as well as coordinating Integrated Pollution Prevention and Control permitting process and integrating the Seveso process of chemical safety in the EIA procedures. In 2008, the Liability for Prevention and Remedying of Environmental Damage Act was adopted. The law has transposed the 2004 Directive 2004/35/EO on environmental liability with regard to the prevention and remedying of environmental damage.



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The present water monitoring systems consist of 500–600 points to monitor the physical and chemical status of surface water, 372 points for groundwater and 700–800 points for hydro-biological monitoring of surface water. Seawater quality is also checked at monitoring stations located on the coast and at the mouths of the rivers flowing into the Black Sea and there are at present 24 automatic monitoring stations for surface water that provide early warning of pollution.

- **Waste Framework Directive:** Bulgaria transposed the WFD into national law by the Waste Management Act, promulgated in SG 53/ 13 July 2012.

The further legislation is also of relevance in regard to the WFD

Ordinance No 9 on the conditions and forms for submission of information for waste management activities and the Public Register of closed enterprises and activities (promulgated in SG 95/2004)

Ordinance for definition of the order and amount of the product fee for products which after their use generates widely spread waste (promulgated SG 120/2008, last amended SG 29/2011)

Ordinance for construction and demolition waste management and recycled constructional materials use (promulgated in State Gazette 89/ 13 November 2012)

- **Landfill Directive** and WAC Decision [EIONET 2009, Eur-Lex 2012]:

Ordinance No 8 on the conditions and requirements for construction and operation of landfills and other facilities and installations for waste disposal and recovery (SG 83/24.09.2004, last amended SG 87/2007)

Ordinance No 7 on the requirements for sites determined for placing of waste treatment facilities (SG 81/17.09.2004)

Ordinance No 14/ 15 November, 2010 on the conditions and requirements for calculation of the deductions and spending of collected funds for activities related with closure and post closure activities on landfill sites (promulgated in SG 93/ 2010)

Packaging Directive: Ordinance on packaging and packaging waste (adopted with CM Decree 271/202012, promulgated in State Gazette 85/06.11.2012)

Others: The requirements on waste classification, Decision 2000/532/EC) has been transposed by the ordinance No 3 on waste classification (SG 44/25.05.2004).

The EU requirements on incineration have been transposed by Ordinance No 6 on the conditions and requirements for construction and operation of incineration-plants and co-incineration plants (SG 78/07.09.2004).

Further the EU requirements on shipments of waste (including financial guarantee), WEEE, batteries and accumulators, ELVs and waste oils have been transposed accordingly.

### III. Legal and policymaking framework and its practical implementation in Bulgaria

Currently, no effective system exists to monitor the implementation of environmental policy documents (strategies, programmes and plans) across the country. Environmental authorities have difficulties to fulfil the monitoring obligations, in particular in terms of producing regular progress reports on the implementation of the various overarching and specialized national and subnational environmental policy documents. This significantly limits coordinated and transparent policy documents implementation. The Government maintains a website with all national level policy documents, including those related to sustainable development and environmental protection ([www.strategy.bg](http://www.strategy.bg)).

Environmental legislation and the policy framework for environmental protection and sustainable development driven by the EU requirements has been strengthened. However, effective implementation of legislation and policies remains a challenge. Bulgaria has been particularly slow in implementing the environmental legislation at the subnational level in areas demanding high infrastructure investments, such as waste and water management. Several key overarching environmental policies have not yet been adopted or have been adopted with delays.

At the same time, there are various requirements for specialized environmental policies, in particular at the local level, which further increase policy fragmentation and the administrative burden. **The processes of strategic planning are poorly linked to budget plans.** At all levels, there is insufficient capacity to develop and implement the wide range of environmental policies. The necessary level of legislative and policy coordination between national and local environmental authorities has not yet been achieved. Bulgaria has established a legislative framework specifying the procedure, scope, methodology and quality assurance system for the obligatory RIA. The scope and the implementation of RIA on the ground has included assessment of environmental impacts.

The Ministry of Environment, in cooperation with the Regional Inspectorates on Environment and Water, should improve the quality assurance mechanism ensuring the effective implementation of the obligations of the Strategic Environmental Assessment, especially at regional level and the provision of support to those carrying out Strategic Environmental Assessments.

The NDP BG 2020, the National Reform Programme and the Government Programme for Stable Development for the period 2014–2018 provide, to some degree, long-term strategic guidance for a transition towards a green economy in Bulgaria. While Bulgaria has been scaling up investment in a green economy, sectoral policy approaches to a green economy are not sufficiently integrated due to the lack of coordination on development, implementation and monitoring of the policies and initiatives to promote a green economy. There are no specific coordinating mechanisms for green economy policies in place.

The Government should adopt an overarching strategic framework for a green economy aimed at strengthening coordinated and coherent development and implementation of green economy initiatives across the country, and establish institutional mechanisms for intersectoral coordination of green economy initiatives.



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Bulgaria does not have national environmental labelling schemes. Instead, the country follows the EU Ecolabel scheme and CE marking. EU Ecolabels are awarded by the Ministry of Environment and Water. However, the scheme is not widely applied in the country and there are only three license holders with 18 products.

As an EU Member State, Bulgaria implements Regulation (EC) No 1221/2009 of the European Parliament and of the Council of 25 November 2009 on the voluntary participation by organizations in a Community eco-management and audit scheme (EMAS). The Ministry of Environment and Water undertakes measures and initiatives for the promotion of EMAS – workshops, presentations at different events, brochures, etc. Despite all these efforts, only six organizations were registered under EMAS from 2007 to 2015. Currently, five more applications are in progress.

NGOs have been active in relation to the conflicts between local development interests and environmental protection in highly sensitive nature areas. Environmental NGOs' activities resulted in stronger protection of national parks and the banning of GMOs on the territory of Bulgaria. However, NGOs generally play a marginal role in the formulation and implementation of environmental legislation and policies. The involvement of NGOs in the advisory and expert councils of the Ministry of Environment and Water and in the interministerial working groups has been limited. There is no budget line in the national budget specifically for the environmental NGOs. Some local funds have reserved for NGO activities, but amounts remain marginal. Since the EU accession in 2007, the funding conditions for NGOs have changed and many international donors have reduced or ceased to provide their financial support to NGOs. As a result, many environmental NGOs that were set up in the 1990s closed down as a consequence of new financial and social conditions.

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## Marine litter

Litter is a pressure on the marine environment that eventually finds its way to the seafloor and onto beaches. Implementation of the **Marine Strategy Framework Directive** has led to an improved understanding of macro- and micro-litter, notably from plastics. Sources of marine litter have been mostly attributed to the following human activities: tourism and recreational activities, urban waste, industrial activities, shipping and commercial fishing. To fight marine litter, Member States draw on a number of existing EU laws, notably on waste management, urban waste water or port reception facilities<sup>1</sup>, as well as on international agreements and the action plans of Regional Sea Conventions<sup>2</sup>. Based on their national programmes, it appears that all 16 Member States are taking, or plan to take, measures to improve waste management in the fisheries sector. The most common measures notified are beach clean-ups, 'fishing for litter' and communication initiatives. While these have a modest impact on reducing the pressure, they help to raise awareness and thus to prevent future pollution. However, targeted measures for beach litter, such as

<sup>1</sup> Directive 2000/59/EC of the European Parliament and of the Council of 27 November 2000 on port reception facilities for ship-generated waste and cargo residues, OJ L 332, 28.12.2000, p. 81-90.

<sup>2</sup> Regional action plans exist for the North-east Atlantic, Baltic and Mediterranean regions, while the action plan for the Black Sea is being developed.



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limiting the proliferation of single-use plastics or reducing microplastics and litter from aquaculture, appear to be underdeveloped. For example, only five Member States<sup>3</sup> specifically addressed aquaculture.

- The programmes of measures for marine litter have to be seen in the wider context of developments at EU level, which led to the adoption of the Circular Economy Package<sup>4</sup>, the European Strategy for Plastics<sup>5</sup> and a legislative proposal on marine litter and single-use plastics<sup>6</sup>.
- Of the 16 Member States, only 6<sup>7</sup> expect to achieve good environmental status for litter by 2020. Malta is the only Member State having applied for an exception on the grounds that actions from neighbouring countries would allegedly hamper its efforts; however, such proposed justification does not appear to be fully substantiated and no alternative timeline is reported.

**The Marine Strategy Framework Directive (MSFD)** sets the framework for Member States to achieve by 2020 Good Environmental Status (GES) for their marine waters, considering 11 descriptors. One of these descriptors (descriptor 10) focuses on marine litter, stating that GES is achieved only when "properties and quantities of marine litter do not cause harm to the coastal and marine environment". An important step in the implementation of the MSFD are the measures to protect the marine environment, which Member States had to put in place by 2016, and which also address marine litter.

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### **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.

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<sup>3</sup> France (in the North-east Atlantic), Ireland, Italy, Spain and Sweden.

<sup>4</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *Closing the loop — An EU action plan for the Circular Economy*, COM(2015) 614 final.

<sup>5</sup> Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, *A European Strategy for Plastics in a Circular Economy*, COM(2018) 28 final.

<sup>6</sup> Proposal for a Directive of the European Parliament and of the Council on the reduction of the impact of certain plastic products on the environment, COM(2018) 340 final.

<sup>7</sup> Belgium, Finland, France, Ireland, the Netherlands and the United Kingdom.



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<b>Measure characteristics</b>	<b>Management area:</b>  - <i>Black Sea</i>	<b>Code:</b>  <i>BLKBG</i>  <b>No. of measure: 21</b>
<b>Measure title</b>	<b>Mainstream marine litter into existing legislation</b>	
<b>Short, precise description of the measure</b>	<p>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.</p> <p>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 MSFD 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.</p> <p>Gaps initially found are:</p> <ul style="list-style-type: none"> <li>- A definition of "marine litter" is missing in the national legislation.</li> <li>- 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.</li> </ul> <p>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.</p> <p><b><u>The implementation of the measure includes the following activities:</u></b></p> <ol style="list-style-type: none"> <li>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.</li> <li>2. Prepare proposals for regulatory changes, as well as regular meetings with the competent authorities to discuss the results and proposals.</li> <li>3. Prepare institutional analysis for current opportunities and the need to ensure implementation of the proposed legislative amendments.</li> <li>4. Carry out procedures for amending the regulations.</li> <li>5. Ensure that amendments to national legislation are adequately enforced (e.g. higher fees, more controls).</li> </ol> <p>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.</p> <p><b>Example on the implementation this measure:</b></p> <p>The most common waste on the beaches are different type of plastic bags and pieces, bottles and pieces of them &gt; 50 &lt; cm, caps and rings, cigarette butts and filters, polystyrene pieces 2,5 &gt; &lt; 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.</p> <p><b>Solution:</b></p>	

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	<p>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:</p> <ol style="list-style-type: none"> <li>1. Firms – contractors of beach concessions on beach cleaning activities to reduce the accumulation of waste on beaches and its introduction into marine environment.</li> <li>2. Individuals, users of the beach services.</li> </ol> <p><b>Possible steps to the guarded and unguarded beaches:</b></p> <ul style="list-style-type: none"> <li>- increasing the number of control inspections on the beaches under concession during the summer.</li> <li>- 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).</li> <li>- 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).</li> <li>- organization of seasonal campaigns for cleaning each year at unguarded beaches by an Order of Minister of Regional Development and Public Works.</li> </ul> <p>The last action could be implemented in the frame of the planned transboundary measure „Annual awareness raising campaigns addressed 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“.</p> <p>Voluntary beach cleaning activities <b>are very effective</b> in removing marine litter from the environment but <b>limited in scale</b> in comparison to the scale of the problem. <span style="float: right; font-size: 2em;">14</span></p>
<p><b>EU measure category</b></p>	<p><i>Categorisation of the measure in accordance with the “PoM Recommendations”:</i></p> <p><b>2a</b></p>
<p><b>Key Types of Measures</b></p>	<p><i>KTMs as defined in the „PoM Recommendations“. Measures can be categorised in one or multiple KTMs.</i></p> <p><b>KTM 29 Measures to reduce litter in the marine environment</b></p>
<p><b>Environmental targets</b></p>	<p><i>Categorisation of the measures in accordance with the nationally defined operational environmental objectives.</i></p> <p>Pressure target</p> <p>10.1.1. Target: Decreasing trend in the amount of marine litter washed ashore and/or deposited on coastlines.</p> <p>10.1.2. Target: Decreasing trend in the amount of marine litter floating on the water surface, in the water column and deposited on the seafloor.</p> <p>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.</p>
<p><b>Descriptors</b></p>	<p><i>Categorisation of the measures to the descriptors in line with Annex 1 MSFD. The descriptors are identified by their short form:</i></p> <p><b>D10 – Marine litter</b></p>



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<p><b>Main pressures</b></p>	<p><i>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:</i></p> <p><b>Other physical disturbance/Marine litter</b></p>
<p><b>Main drivers</b></p>	<p><i>The sectors/activities targeted by the measure</i></p> <ul style="list-style-type: none"> <li>• Coastal human activities (e.g. tourism, recreation, sports and eco-tourism)</li> <li>• Activities extracting biological resources (fisheries including recreational, maerl, seaweed)</li> <li>• Sea-based mobile activities (shipping)</li> <li>• Waste disposal (dredging)</li> </ul> <p>Other drivers are covered by WFD-related measures:</p> <ul style="list-style-type: none"> <li>• Activities producing seafood (aquaculture) - information on planned activities and measures to reduce pollution from waste.</li> <li>• 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.</li> <li>• Land-based activities (e.g. urbanization, industry, agriculture) - information on planned activities and measures to reduce pollution from waste.</li> </ul>
<p><b>Characteristics</b></p>	<p><i>Using the analysis carried out in 2012 as a basis, categorisation of the measures in accordance with the characteristics defined in the “PoM Recommendations”:</i></p> <p style="text-align: right;"><b>15</b></p> <ul style="list-style-type: none"> <li>- Marine and coastal birds</li> <li>- Marine mammals</li> <li>- Fish</li> <li>- Benthic habitats</li> </ul>
<p><b>Link to other directive/legislation/policy</b></p>	<p><i>Aligning objectives with other legal commitments</i></p> <p>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)</p> <p>Convention for the Protection of the Black Sea Against Pollution and International Commission for protection of Danube river (ICPDR)</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>



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	<p>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).</p> <p>Also, this measure is related to the following measures for the protection of coastal waters included in the Program of measures to 2<sup>nd</sup> Black sea RBMP (WFD key type of measures (KTM) 21):</p> <ul style="list-style-type: none"> <li>- Conducting annual campaigns (spring and autumn) to clean river mouths.</li> <li>- Provision of waste containers and regular garbage transportation from the areas of fishing villages on the territory of the coastal municipalities.</li> <li>- Implementation of the control of waste management in fishing villages in coastal municipalities.</li> <li>- Collection of information for and mapping of illegal dumps in coastal municipalities (inc. sending signals to relevant authorities, inspections and their cleaning up).</li> <li>- 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.</li> </ul>
<p><b>Necessity for transnational regulation</b></p>	<p><i>Information as regarding the necessity for regulations at EU, regional and international level to achieve MSFD environmental objectives.</i></p> <p>Yes, a transnational approach is needed and to be tackled under the frame of the BSC (Marine Litter Action Plan).</p>
<p><b>Mode of implementation</b></p>	<p><i>Stating the implementation process in line with the „PoM Recommendations“; multiple options possible:</i></p> <ul style="list-style-type: none"> <li>• Legislative</li> </ul>
<p><b>Implementation zones</b></p>	<p><i>i.e. the spatial impact of the measure: MS land / FW, WFD TW, WFD CW, Territorial waters, EEZ</i></p> <p>MS/land, WFD CW, Territorial waters EEZ of Republic of Bulgaria</p>
<p><b>Contribution of the measure to achieving the target</b></p>	<p>The measure "Mainstream marine litter into existing legislation" aims at improving the status of the marine environment for the Descriptor 10 "Marine Litter".</p> <p>To achieve this, the measure will target sources of marine litter through adapting the respective legislation and regulations.</p> <p>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</p>

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	<p>litter in the Black Sea, which itself would reduce minor the measure's contribution to achieving the targets<sup>8</sup>. 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.</p> <p>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.</p> <p>In summary, <b>the contribution of the measure</b> "Mainstream marine litter into existing legislation" to reach the <b>targets is probably medium</b>, with a potential of being <b>very effective</b> (through well-designed and enforced regulations).</p>
<p><b>Transboundary impact</b></p>	<p><i>Information on the impact of the measures on transboundary neighbours</i></p> <p>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.</p>
<p><b>Costs</b></p>	<p>Public costs:</p> <ol style="list-style-type: none"> <li>1) Review and proposals for amending the national legislation (tender procedure, costs for contracting).</li> <li>2) Amendment of national legislation (costs for expert drafting meetings).</li> <li>3) Costs for enforcement/controls (incl. increasing the number of control persons /inspectors).</li> </ol> <p>Private costs:</p> <p>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).</p> <p>In summary, the costs of the measure are estimated to be <b>medium to high</b> (50.000 - 1 million €), depending on the level and type of enforcement realized.</p>
<p><b>Effectiveness</b></p>	<p>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.</p> <p>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.</p> <p>The review and adaptation of the respective national regulations, is <b>potentially very effective</b> 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 <b>strongly depends on enforcement and control</b>.</p>

<sup>8</sup> 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](http://marine-litter-conference-berlin.info/userfiles/file/Issue%20Paper_Final%20Version.pdf))



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	<p>To conclude, the <b>overall effectiveness of the measure</b> "Mainstream marine litter into existing legislation" is estimated to be of <b>medium level, with a potential of very high effectiveness</b> in the case of strong regulatory and economic legislative changes accompanied by the necessary control and enforcement activities.</p>
<p><b>Indicator(s) to measure effectiveness</b></p>	<p>Indicator: Amounts of marine litter (number of items, volume, and/or composition<sup>9</sup>)</p> <p>a) on the shore/beaches;</p> <p>b) in the water column;</p> <p>c) on the water surface;</p> <p>d) on the seafloor.</p> <p>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<sup>3</sup>).</p> <p>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<sup>10</sup>).</p> <p>Indicator: Establishment of an inter-ministerial technical working group supporting the work on Descriptor 10.</p> <p>Indicator: Number of meetings to discuss changes to legislative documents regarding the prevention and management of waste entering into the marine environment.</p> <p>Indicator: Number of amended legislative documents.</p>
<p><b>Socio-economic assessment</b></p>	<p>The measure "Mainstream marine litter into existing legislation" has a <b>low-medium effectiveness</b> 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).</p> <p>At the same time, the public <b>costs of the measure are also medium high</b> (depending on the type and level of controls and of enforcement realized).</p> <p>Hence, the <b>cost-effectiveness of the measure</b>, i. e. comparing costs with potential benefits in terms of reaching MSFD objectives, can be described as being of <b>medium to high level</b>. 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.</p> <p>Additional socio-economic effects of the measure are:</p> <ul style="list-style-type: none"> <li>- 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);</li> <li>- the implementation of the measure is not expected to have negative effects on the marine environment;</li> <li>- 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);</li> <li>- 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</li> </ul>

<sup>9</sup> "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](http://qsr2010.ospar.org/media/assessments/p00306_Litter_Report.pdf)).

<sup>10</sup> Study to gather data, define the environmental target and determine potential threshold values is ongoing.



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	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.
<b>Coordination level</b>	<i>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</i>  at national level
<b>Technical feasibility</b>	<i>Options:</i> <ul style="list-style-type: none"> <li>Frequently applied; extensive experience / evidence of good practice</li> </ul>
<b>Body responsible for the measure implementation</b>	Ministry of Environment and Waters (MoEW).
<b>Financing opportunities</b>	State budget.  Pilot projects (if necessary): LIFE programme
<b>Temporal coverage</b>	<b>Starting time: 2017</b> <b>Ending time: 2019</b>
<b>Difficulties in implementation</b>	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.

#### IV. List with key pollutants in district Burgas and short analyse of the environmental situation in the target area

Marine litter is a global concern, affecting all the oceans of the world. Every year, millions and millions of tonnes of litter end up in the ocean worldwide, posing environmental, economic, health and aesthetic problems.

Poor practices of solid waste management, waste water (including storm water) collection and treatment, lack of infrastructure and awareness of the public at large about the consequences of their actions aggravate substantially the situation.

#### Key pollutants

The most significant process causing degradation of the Black Sea as far as pollution is concerned has been the massive **over-fertilisation** by nitrogen and phosphorus compounds, coming largely from agricultural, domestic and industrial sources. This phenomenon called **eutrophication** has changed the entire Black Sea ecosystem. The compounds enter the sea from sources in the 17 countries in its drainage area. The coastal countries contribute roughly 70% of the total amount and almost all the remaining amount enters the sea via the Danube River.

Discharge of insufficiently treated **sewage**: introduce microbiological contaminants into the Black Sea and pose a threat to human health and in some cases hamper the development of



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sustainable tourism and aquaculture. The discharge is estimated at about 571 million cubic metres annually.

**Oil pollution.** Oil enters the sea as a result of operational discharges of vessels and accidents, as well as through land based sources. Oil pollution levels are not high in the open sea but are unacceptable in many coastal areas. Annually some 95 000 tons of unrecoverable oil waste is discharged into the Black Sea. **Toxic substances** such as pesticides and heavy metals do not appear to pollute the whole sea but appear in 'hot spots' near certain well-identified sources. These polluters are usually associated with heavy industry and with the economic decline in the region their use has decreased considerably.

**Radioactive substances** have been introduced to the Black Sea in small quantities from nuclear power generation and as a result of the Chernobyl accident in 1986.

Uncontrolled deballasting from ships has introduced to the Black Sea exotic species, brought from other parts of the planet and flourishing in the new environment. Some of them have proliferated becoming predators to the indigenous species thus damaging the Black Sea ecosystem.

**Solid waste** dumped into the sea from ships and coastal towns. As an enclosed sea, the Black Sea is particularly vulnerable to this kind of pollution as any floating or half-submerged waste is inevitably washed ashore. Some beaches have a high accumulation of garbage presenting a risk to marine animals and humans.

The impact of **shipping** and the large ports on the marine environment is significant and includes issues related to illegal waste disposal, washing of vessels, the use of toxic chemicals and paints, and transportation of hazardous materials. The discharge of such materials, especially petroleum products, causes significant damage to the marine environment, economy (tourism, fishing, agriculture) and human health.

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According to the policy for waste management in Bulgarian ports waste are separated to the following categories:

- ship - generated waste (garbage as domestic, food and plastics);
- industrial waste (scrap, paper, wood, plastics, etc.).
- hazardous waste (used batteries, fluorescent lamps, etc) and dangerous liquid substances.
- oil waste (sludge & bilge) and wastewaters (sewage).

#### **Main sources of marine litter are:**

Land-based:

- land-fills
- rivers and floodwaters
- industrial outfalls
- discharge from storm water drains
- untreated municipal sewerage



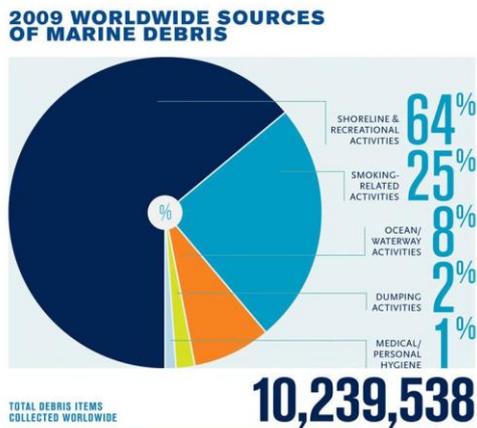
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- littering of beaches, coastal areas (tourism)

Sea-based:

- fishing industry
- shipping (e.g. transport, tourism, fishing)
- offshore mining and extraction
- illegal dumping at sea
- discarded fishing gear



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The results of the conducted monitoring of ML (Seasonal dynamics of **marine litter along the Bulgarian Black Sea coast**, June 2017. A. Simeonova, R. Chuturkova) exhibited that the beaches along the Bulgarian Black Sea coast were highly polluted. The most significant levels of pollution were due to the category: artificial polymer materials - 84.3%. Dominant in this category, including 92 types were the cigarette butts and filters, followed by plastic caps/lids of beverages and plastic cups and cup lids.

The seasonal fluctuations for the most of ML showed highest quantities during the summer period compared with the rest of the seasons, as the differences are of high statistical significance. The reasons for the highest ML accumulation are probably the recreational activities, increased tourist flow and the wild camping. Each of the surveyed beaches has its own specifics that influences the ML dominance and seasonality.

The highest were the densities of ML on the beaches used for recreational activities in most of the seasons such as Channel 2 - Varna and Irakli, Burgas. The Channel 2 - Varna was used for recreational fishing through all seasons and Irakli beach for wild camping during mild weather conditions.



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The conducted monitoring on the Bulgarian Black Sea coast will be useful for gathering information on the trends of the indicator 10.1.1. “Quantity of ML accumulated on the coastline”, Descriptor 10 “Marine litter” and will help to develop appropriate strategy for achieving good environmental status of the marine environment by 2020.

Organization of yearly based campaigns for ML monitoring, mapping the sources and ML quantities will ensure collection of data which will serve to plan effective measures to reduce the negative impact on the marine environment.

The results of the conducted ML monitoring along the Bulgarian Black Sea<sup>viii</sup> beaches exhibited greatest numerical predominance of category:

Artificial polymer materials during the whole period (through all seasons) - 16,690 number of items (nos.), which represented 84.3% of the total ML

The next ML category with higher amounts recorded was Paper/cardboard - 7.2%, followed by category: Metal - 2.6% and category: Glass/ceramics - 2.5%. The rest of the registered ML categories were of lower proportion: Rubber - 0.79% and processed wood - 0.69%.

Regarding **the Polymer category**, including 92 types of items in the survey form, the highest was the quantitative distribution of cigarette butts and filters .

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**Category: artificial polymer materials.** Regarding the Polymer category, including 92 types of items in the survey form, the highest was the quantitative distribution of cigarette butts and filters

1. Cigarette butts and filters
2. Plastic caps/lids of beverages
3. Plastic cups and cup lids
4. Plastic caps/lids unidentified
5. Plastic/polystyrene pieces 2.5 ÷ 50 cm
6. Crisps packets/sweets wrappers
7. Drink bottles N0.5 L
8. Small plastic bags
9. Drink bottles ≤0.5 L
10. Plastic rings from bottle caps/lids

**Category: paper/cardboard.**

1. Paper fragments
2. Cigarette packets
3. Newspaper and magazines
4. Cups and food trays
5. Other paper items
6. Cardboard boxes and fragments
7. Cartons/Tetrapack (others)
8. Cartons/Tetrapack (milk)
9. Paper bags
10. Tubes for fireworks



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**Category: metal.**

1. Cans (beverage)
2. Bottle caps and lids
3. Other metal pieces b50 cm
4. Cables
5. Industrial scrap
6. Paint tins
7. Fishing related weights, hooks
8. Tableware
9. Household batteries
10. Other cans

**Category: glass/ceramic.**

1. Bottles incl. pieces
2. Construction material
3. Other glass items
4. Glass and ceramic fragments N2.5
5. Light bulbs
6. Jars incl. pieces
7. Tableware
8. Fluorescent light tubes

**Category: rubber.**

1. Other rubber pieces
2. Inner tubes and rubber sheet
3. Condoms, incl. packaging
4. Balloons and balloon sticks
5. Rubber bands
6. Tyres and belts
7. Balls
8. Bobbins (fishing)
9. Rubber boots
10. Wheels

**Category: cloth/textile.**

2. other textiles, incl. rags
3. rope, string and nets
4. clothing/rags (clothing, hats, towels)
5. shoes and sandals
6. sails and canvas
7. carpets and furnishing
8. backpacks and bags
9. sacking
10. tampons and tampon applicators



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### Category: processed wood.

1. Ice –cream sticks
2. Processed timber
3. Other wood N50 cm
4. Corks
5. Other wood b50 cm
6. Pallets
7. Crates
8. Matches and fireworks

The BS-SAP recommends preventive measures to control pollution. Anticipatory action is an underlying principle of the Plan, though it employs the 'polluter pays' principle as well. The Plan calls upon the signatories to agree on common water quality objectives and develop a strategy of gradual step-by-step reduction of loads until the objectives are reached. Places where pollution levels are unreasonably high called "hot spots" are regarded as immediate priorities for action. The Action Plan not only addresses pollution entering the sea from rivers and discharge pipes but also includes detailed provisions for preventing pollution from ships, for minimizing pollution from maritime accidents and controlling illegal dumping of waste into the sea. Another important provision on pollution concerns future monitoring of the state of the Black Sea.

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### V. Trans-border and cross-border initiatives

Cleaning up the oceans is one option, it is however not the most efficient method against marine litter. You could compare it to scouring the sand in the desert and this is simply something that no county could afford. The solution is to tackle the problem at its source. Marine litter is also one of the clearest symbols of a resource *inefficient* economy. Valuable materials are polluting our beaches and damaging our environment instead of being pumped back into our economy. Therefore, a circular economy approach which puts the emphasis on preventing waste and on recycling and reuse of materials and products in the first place, is the best solution to the marine litter problem.

#### Joint cross-border measures Bulgaria- Romania

- Development of Regional Marine Litter Action Plan (joint methodology for quantifying the marine litter, identification of sources, prosecution of offenders, etc.). This measure is developed as common (joint) 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”. , See appendix 1
- Improvement of management of ship generated waste

Generally this measure includes an assessment and enforced control of the activities of illegal dumping, collection and transportation of ship - generated waste (this includes garbage as domestic, food and plastics in term of MARPOL Annex V, and also oil waste (sludge & bilge) and wastewaters., see appendix 2



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- 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., see appendix 3
- Awareness building (educational campaigns) of and advisory services for Fisheries Local Action Groups (FLAGs) regarding effective use of environmentally friendly fishing techniques and equipment, see appendix 4

### Cooperation Initiative in Burgas

**The European Commission’s Directorate General for Maritime Affairs and Fisheries, the Bulgarian EU Presidency and the Municipality of Burgas are happy to invite you to European Maritime Day 2018. The conference took place on 31 May and 1 June 2018 in Burgas, Bulgaria.**

### MINISTERIAL DECLARATION TOWARDS A COMMON MARITIME AGENDA FOR THE BLACK SEA

#### Burgas Declaration - 31 May 2018

The Ministers responsible for maritime affairs of the participating countries, namely the Black Sea coastal States – Bulgaria, Georgia, Romania, the Russian Federation, the Republic of Turkey and Ukraine – as well as the Republic of Moldova, met during the European Maritime Day in Burgas on 31 May 2018 under the chairmanship of Bulgaria and in the presence of H.E. Mr Karmenu Vella, European Commissioner in charge of Environment, Fisheries and Maritime Affairs and H.E. Ambassador Michael B. Christides, Secretary General of the Organization of the Black Sea Economic Cooperation.

Burgas Declaration UNDERLINING that

- The respect for the norms and principles of international law is at the core of regional cooperation in the Black Sea;
- The United Nations Convention on the Law of the Sea as well as the other relevant international conventions and customary international law related to activities in oceans and seas are fully considered;

The Convention on the Protection of the Black Sea against Pollution (Bucharest Convention) plays a key role for the environmental welfare of the Black Sea;

- The International Maritime Organization (IMO) sets a regulatory framework ensuring a safe, secure, efficient international shipping industry and a green and sustainable maritime transportation system.

3. ACKNOWLEDGING that:

- The Black Sea is an enclosed sea where maritime cooperation can be further developed through regional ownership and home-grown initiatives;
- There are common maritime and marine challenges facing all participating countries;



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- Maritime and coastal industries, trade, other human activities and marine environment are interdependent;
- Clean and healthy rivers flowing into the Black Sea are drivers for national and regional economies, and contribute to the good environmental status of the Black Sea;
- A coordinated and coherent regional approach – that takes into account the sovereign rights and the distinctive nature of each country and the environmental challenges of the sea as a whole – can help to address the maritime challenges in the region and promote sustainable growth. Areas of future cooperation could take into account the following common drivers:
  - A healthy Black Sea as a stimulus for national and regional economies and a catalyst for sustainable growth and increased investments;
  - Improved connectivity in the region that can bring shared socio-economic benefits;
  - The need to consider at an early planning stage the potential environmental impacts of all maritime activities, and the adequate actions to address them;
  - The need for sustainable exploitation of marine resources and the need to restore and maintain good environmental status, to ensure resilience of ecosystems, communities, and economies in the region;
  - Marine research and innovations can contribute to the sustainable development of the region by fostering integration of knowledge and efforts in the maritime domain.

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#### 4. WELCOME:

- The initiative of the European Commission to set up the “Facility for Blue Growth in the Black Sea” which aims to support maritime cooperation between the participating countries for sustainable blue growth in the Black Sea and to identify sources and policy approaches for a more sustainable Blue Economy;
- The work of the Steering Group “Facility for Blue Growth in the Black Sea”;

The financial support provided through the Joint Operational Programme “Black Sea Basin Programme 2014-2020”, funded by the European Neighbourhood Instrument (ENI), the European Regional Development Fund (ERDF) and the Instrument for Preaccession Assistance (IPA);

- The funding available under the Black Sea Project Promotion Facility<sup>3</sup>, aiming to foster the achievement of the BSEC objectives and the implementation of the BSEC Economic Agenda;
- The common work of the scientists from the participating countries and the support of the European Commission to identify key challenges for marine research and innovation in view of developing a “Research and Innovation Agenda for Blue Growth in the Black Sea”;
- The work conducted by the participating countries, in particular under the Commission on the Protection of the Black Sea Against Pollution (BSC), to improve environmental observation, monitoring and protection;
- The establishment of the “Black Sea Littoral States Border/Coast Guard Agencies Cooperation Forum” (BSCF) with the initiative of the Republic of Turkey and the



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participation of Bulgaria, Georgia, Romania, the Russian Federation and Ukraine for promoting and enhancing the cooperation in various fields, including the protection of Black Sea natural resources, search and rescue activities, prevention of marine pollution and the protection of marine environment;

- The new dynamics in the governance of fisheries and aquaculture in the Black Sea in the context of the Black Sea Working Group of the General Fisheries Commission for the Mediterranean within the framework of the Food and Agriculture Organization of the United Nations (GFCM-FAO);
- The ongoing work to strengthen cooperation on maritime affairs in the Black Sea area between the participating countries, the European Commission, BSEC, BSC, GFCM as well as with the Conference of the Peripheral Maritime Regions (CPMR).

#### 5. RECOGNISE THE POTENTIAL OF VOLUNTARY COOPERATION ON:

- Shipping, passenger and cruising lines to boost trade and the promotion of transport connectivity to develop business throughout the Black Sea basin;
- Maritime and coastal tourism in the Black Sea to spur cooperation for a sustainable Blue Economy, taking into account the cultural and environmental assets of the region;

Marine science and maritime education and training as a good basis for cooperation and as key factors in improving and developing new skills in the Blue Economy;

- Marine research and innovation as a key priority for cooperation;
- Promoting maritime investment for a sustainable blue economy through planning tools;
- An improved marine environmental protection for developing a sustainable Blue Economy, and in particular coordination while addressing transboundary environmental challenges, such as plastic marine litter;
- Maritime and environmental observation and monitoring which will contribute to the sustainable use of marine resources and to the achievement of good environmental status.

#### 6. SUPPORT:

- The setting up of a Common Maritime Agenda with concrete priorities and actions for the development of, inter alia, a sustainable Blue Economy in the Black Sea, promoting enhanced cooperation on maritime affairs among the participating countries. Such an Agenda will serve as a valuable tool for the participating countries, the European Commission and other international donors to align available funding with the priority areas identified by the participating countries;
- The objective of the participating countries is to reach agreement on a Common Maritime Agenda for the Black Sea in 2019.

#### 7. UNDERLINE that:

- The cooperation towards the setting up of the Common Maritime Agenda is a bottomup process between the participating countries, with the involvement of the relevant stakeholders. Participation in the activities which will be undertaken under this cooperation remains voluntary, depending on the needs to be addressed and as appropriate;
- The cooperation towards the setting up of the Common Maritime Agenda complements



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the work of the existing regional structures such as BSEC, BSC, as well as CPMR, and capitalises on their achievements. This cooperation is targeted at inclusive growth, marine and coastal environment protection, knowledge exchange, technology transfer, upgrading of skills, job creation and enhancing access to sustainable financing. Further synergies and mutually reinforcing agendas are to be actively explored in the future.

#### 8. ENCOURAGE:

- The participating countries to continue working together to identify the regional maritime and marine priorities and actions to be included in the Common Maritime Agenda. This should be done including through the Steering Group on the implementation of the “Facility for Blue Growth in the Black Sea” project;

The participating countries to consider, where applicable, the areas listed under Point 5 of this Declaration - shipping, passenger and cruising lines; the promotion of transport connectivity, maritime and coastal tourism; maritime education and training; marine research and innovation; maritime investment; marine environmental protection; environmental observation and monitoring - as possible cooperation areas to be further developed, including under the Common Maritime Agenda for the Black Sea.

**The regional system for waste management in the region of Burgas** serves 210 settlements in total, with about half a million residents. The municipalities falling into the scope of the system are: Burgas, Sredets, Kameno, Nesebar, Pomorie, Aytos, Ruen, Karnobat and Sungrulare.

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An infrastructure has been built for environmentally-friendly neutralization of the entire quantity of household and construction waste generated on the territory of the region of Burgas.

## VI. List of main stakeholders and institutions in district Burgas with the focus on waste management and water management

### Key stakeholders in waste prevention activities

#### State

The state should create effective conditions and regulations to support the participants in the activities of waste prevention to fulfil its obligations under the WFD and WMA. For this purpose, the state can provide the relevant legislation, as other taxes and/or fees that stimulate production or consumption with less waste. The state may also be governed by statutory instrument even bans on certain products if it is not contrary to European standards, and the determination of liabilities, such as mandatory redemption restrictions in distribution, regulation of transportation, storage and treatment of waste, etc. Moreover, under Art. 49 and Art. 50 of the WMA state is obliged to implement measures to plan and prepare waste management plan and waste prevention program. The introduction of licensing and registration regimes is also duty of the state, which is regulated by WMA.



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### **Municipalities**

Municipalities are responsible for waste collection in their territory by performing this activity individually or through regional associations. Under Art. 52 of the Waste Management Act, they are required to prepare waste management programmes, which structure, goals and projections meet NWMP, including WPP, by virtue of the WMA is an integral part of NWMP. In municipal programs and regulations for waste management can be included very specific measures for such as limiting the use of disposable utensils at public events.

### **Economic and scientific entities, NGOs**

In order to prevent waste the operators supported by the scientific community can develop products and production processes that are environmentally friendly and less waste and optimize existing processes and products. Products put on the market must be longer long life, easy to repair and produced and marketed without unnecessary packaging. The operators, supported by scientific organizations can take measures to waive the production of environmental-friendly products. So far, that refusal is more voluntary and driven by marketing or other reasons, but it can be made compulsory in the development and enforcement of relevant laws, regulations and standards. NGOs that support the ideas of a society striving for zero waste can create platforms and voluntary networks of all operators who are willing to contribute to the implementation of these policies.

### **Households**

Although major amounts of waste are not generated by households, respectively from end buyers, measures to prevent waste are directed at the majority of them. Each user can restrict the purchase of goods that lead to a lot waste generation and thus to force manufacturers to stop or at least reduce the production of such goods. At this stage it means the user has this consciousness that even be willing to tolerate restrictions in their "comfort", respectively, to put more effort and time. Therefore, real and existing waste prevention among consumers can be expected when the market offers enough goods and services that are efficient from an environmental perspective.

**Appendix.** List of stakeholders in district Burgas



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<sup>i</sup> <https://beltandroad.hktdc.com>

<sup>ii</sup> FY 2018 Bulgaria Country Opinion Survey Report, THE WORLD BANK GROUP

Public Opinion Research Group

<sup>iii</sup> COM(2011) 571 final

<sup>iv</sup> DECISION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 20 November 2013 on a General Union Environment Action Programme to 2020 "LIVING WELL, WITHIN THE LIMITS OF OUR PLANET"

<sup>v</sup> Brussels, Green Paper on a European Strategy on plastic waste in the environment, 2014

<sup>vi</sup> Documents can be found on the website of the Ministry of Finance: [www.minfin.bg/document/10621](http://www.minfin.bg/document/10621)

<sup>vii</sup> UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE ENVIRONMENTAL

PERFORMANCE REVIEWS BULGARIA, UNITED NATIONS 2017

<sup>viii</sup> Seasonal dynamics of marine litter along the Bulgarian Black Sea coast, June 2017. A. Simeonova, R. Chuturkova

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