**Factsheet for new measures**

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

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

***Any other codes*** | **Code:*****MSFD reporting code*****No. of measure:*****2*** |
| **Measure title** | Introduction of ecolabelling (based on of existing relevant ecolabels) related to aquaculture (e.g. Blue mussels) |
| **Short, precise description of the measure** | Ecolabelling is a market-based mechanism designed to incentivize aquaculture management with potential market rewards,The measure aims to develop ecolabelling schemes for promoting sustainability of aquaculture and bring together elements of the market, industry, environmental interests and communities. An appropriate ecolabelling measure can facilitate the access on the new markets, consolidation or expansion of the market share on existing markets, greater credibility and increased earning through potential price premium. Following actions are required for developing the measure:2.1. setting up Working Groups 2.2. development of public awareness campaigns2.3. implementation (including permanent promotion material) |
| **EU measure category** | 2a |
| **Key Types of Measures** | KTM 31 Measures to reduce contamination by hazardous substances (synthetic substances, non-synthetic substances, radio-nuclides) and the systematic and/or intentional release of substances in the marine environment from sea-based or air-based sourcesKTM 36 - Measures to reduce other types of biological disturbance, including death, injury, disturbance, translocation of native marine species, the introduction of microbial pathogens and the introduction of genetically-modified individuals of marine species (e.g. from aquaculture) |
| **Environmental targets** | **RO targets**9.1.1. The levels of heavy metals (Cu, Cd, Pb, Ni, and Cr) in fish and shellfish for human consumption are maintained below the thresholds values regulated by European legislation (REGULATION (EC) no. 1881/2006 setting maximum levels for certain contaminants in foodstuffs (including shellfish and fish), as amended by: Regulation (EC) no. 1126/2007; Regulation (EC) no. 565/2008; Regulation (EC) no. 629/2008; Regulation (EU) No. 105/2010; Regulation (EU) No. 165/2010). The levels of sum of 6 PCBs (PCB28, PCB52, PCB101, PCB138, PCB153, and PCB 180) are maintained below the thresholds values regulated by European legislation (REGULATION (EC) no. 1881/2006 setting maximum levels for certain contaminants in foodstuffs (including shellfish and fish), as amended by Regulation (EC) no. 1259/2011). The levels of organochlorine pesticides (HCB, lindane, aldrin, endrin, dieldrin, p,p’ DDE, p,p’ DDD, p,p’ DDT) are maintained below the thresholds values regulated bt national legislation (Order 147/2004 for the approval of veterinary rules and food safety in terms of pesticide residues in animal and non-animal products and veterinary drug residues in animal products).  The levels of PAHs (benzo(a)piren) are maintained below the thresholds values regulated by European legislation (REGULATION (EC) no. 1881/2006 setting maximum levels for certain contaminants in foodstuffs (including shellfish and fish)).9.1.2 No more than 25% of all samples investigated in a year exceed the regulated levels for heavy metals; no more than 5% of all samples investigated in a year exceed the regulated levels for the sum of PCBs, PAHs and organochlorine pesticides. Regulated levels of heavy metals, PAHs and PCBs by European legislation: REGULATION (EC) no. 1881/2006 setting maximum levels for certain contaminants in foodstuffs (including shellfish and fish), as amended by: Regulation (EC) no. 1126/2007; Regulation (EC) no. 565/2008; Regulation (EC) no. 629/2008; Regulation (EU) No. 105/2010; Regulation (EU) No. 165/2010; Regulation (EC) no. 1259/2011.Levels of organochlorine pesticides regulated by national legislation: Order 147/2004 for the approval of veterinary rules and food safety in terms of pesticide residues in animal and non-animal products and veterinary drug residues in animal products.BG**9.1.1 Targets for fish species** – The levels of contaminants in the following fish species: **Еuropean** sprat (*Sprattus sprattus* sulinus), Anchovy (*Engraulis encrasicholus ponticus*), Turbot (*Psetta maxima maeotica*), Blue whiting (*Merlangius merlangus*), Spiny dogfish (*Squalus acanthias*), Goby (*Neogobius melanostomus*), Bonito (*Sarda sarda*) и Horse mackerel (*Trachurus mediterraneus ponticus*) are maintained below the following threshold values (Commission Regulation (EC) No 1881/2006, transposed in the national legislation in Order No 31/29.07.2004):* Pb < 0.20 mg/kg; (for Horse mackerel (*Trachurus mediterraneus ponticus*) Pb < 0.4 mg/kg);
* Cd < 0.05 mg/kg; (for Bonito (*Sarda sarda*) and for Horse mackerel (*Trachurus mediterraneus ponticus*) Cd < 1 mg/kg)
* Hg < 0.05 mg/kg; (for Bonito (Sarda sarda Hg <1 mg/kg)
* Al < 30 mg/kg;
* As < 5 mg/kg;
* Cu < 10 mg/kg;
* Ni < 0,5 mg/kg;
* Cr < 0,3 mg/kg;
* Zn < 50 mg/kg;
* Dioxins < 4 pg WHO-PCDD (F-TEQ) g live weight;
* Benzo(a) pyrene < 2 µg/kg.

***Explanation****: WHO - World Health Organization; PCDD -Polychlorinated dibenzodioxins (dioxins); F-TEQ - toxic equivalent concentration.*The levels of contaminants in the following seafood are maintained below the threshold values in with the following threshold values of contaminants in the fish (Directive 2013/39/EC as regards priority substances in the field of water policy):* Hg < 20 µg/kg;
* HCB < 10 µg/kg;
* HCBD < 55 µg/kg;
* Heptachlor and heptachlor epoxide <6,7\*10-3 µg/kg;
* Dicofol < 33 µg/kg;
* PFOS < 9,1 µg/kg;
* BDEs < 0,0085 µg/kg;
* HBCDD < 167 µg/kg;

below the following threshold value in accordance with Directive 2013/39 / EC for fish and shellfish:Dioxins (PCDD+PCDF+PCB-DL) < 0.0065 µg/kg TEQ (toxic equivalent concentration).**9.1.1 Targets for shellfish species** – The levels of contaminants in the following shellfish species: Veined rapa whelk (*Rapana venosa*), Mediterranean mussel (*Mytilus galloprovincialis*) are maintained below the following threshold values (Commission Regulation (EC) No 1881/2006, transposed in the national legislation in Order No 31/29.07.2004 and Black Sea Monitoring and Assessment Programme):* Pb < 1.5 mg/kg;
* Cd < 1 mg/kg;
* Hg < 0.5 mg/kg;
* As < 2 mg/kg;
* Cu < 30 mg/kg;
* Zn < 200 mg/kg;
* Benzo(a)pyrene < 10 µg/kg.

**below the threshold values set in Directive 2013/39/EC regarding the water policy on priority substances in shellfish species**:* Benzo(a) pyrene < 5 µg/kg;
* Fluoranthene < 30 µg/kg.

below the following threshold value in accordance with Directive 2013/39 / EC for fish and shellfish:* Dioxins (PCDD+PCDF+PCB-DL) < 0.0065 µg/kg TEQ (toxic equivalent concentration).

**9.1.1 Target for radionuclides in fish and shellfish products** **used as seafood** – the concentration of radionuclides in the Black Sea fish and shellfish species like Mediterranean mussel (*Mytilus galloprovincialis*) and Veined rapa whelk (*Rapana venosa*) is below the threshold values (thresholds based on the values set in Council regulation (EURATOM) No 3954/87, transposed in the national legislation through Order No. 11 from 18.04.2002):* The levels of the isotopes of strontium, notably Sr-90, is below 750 Bq/kg;
* All other radionuclides of half-life greater than 10 days, notable Cs-134 and Cs-137 is below 1250 Bq/kg;

**Target on indicator 9.1.1 for contaminants relevant to fish and shellfish products for which regulatory levels have not been set**:* Polychlorinated biphenyls (PCBs) - decreasing trend in the concentration of Non dioxin-like Polychlorinated biphenyls (PCBs) in fish and shellfish;
* Decreasing trends in the concentration of p,p’-DDE, p,p’-DDD, p,p’-DDT.

**Target on indicator 9.1.1 on the number of contaminants which have exceeded maximum regulatory levels** – the number of contaminants, which have exceeded maximum regulatory levels, is decreasing.**Target on indicator 9.1.2 on the frequency of regulatory levels being exceeded** – Frequency of regulatory levels being exceeded is decreasing. |
| **Descriptors** | D9 – Contaminants in food |
| **Main pressures** | *Contamination by hazardous substances**— introduction of synthetic compounds (e.g. priority substances under Directive 2000/60/EC which are relevant for the marine environment such as pesticides, antifoulants, pharmaceuticals, resulting, for example, from losses from diffuse sources, pollution by ships, atmospheric deposition and biologically active substances),**— introduction of non-synthetic substances and compounds (e.g. heavy metals, hydrocarbons, resulting, for example, from pollution by ships and oil, gas and mineral exploration and exploitation, atmospheric deposition, riverine inputs),**— introduction of radionuclides**Biological disturbances**- introduction of microbial pathogens**Systematic and/or intentional release of substances* |
| **Main drivers** | *Industry, Agriculture, Tourism and Recreational activities, Shipping, Energy production (offshore platforms), Waste Disposal, Extraction of non-living resources, Port operations, Urban discharges* |
| **Characteristics** | * Benthic habitats
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| **Link to other directive/legislation/policy** | Directive 2013/39/EC as regards priority substances in the field of water policy (in shellfish species)Regulation (EC) no. 1881/2006 amended by Regulation (EC) no. 1126/2007; Regulation (EC) no. 565/2008; Regulation (EC) no. 629/2008; Regulation (EU) No. 105/2010; Regulation (EU) No. 165/2010, Regulation (EC) no. 1259/2011;Romanian legislation: Order 147/2004 for the approval of veterinary rules and food safety in terms of pesticide residues in animal and non-animal products and veterinary drug residues in animal productsCommission Recommendation of 8 June 2000 on the application of Article 36 of the Euratom Treaty concerning the monitoring of the levels of radioactivity in the environment for the purpose of assessing the exposure of the population as a whole Commission Regulation (EC) No 1881/2006, transposed in the Bulgarian national legislation in Order № 31/29.07.2004) Council regulation (EURATOM) No 3954/87, transposed in the Bulgarian national legislation through Order № 11 from 18.04.2002)Black Sea Monitoring and Assessment Programme (BSIMAP) to the Black sea CommissionRomanian legislation: Order 147/2004 for the approval of veterinary rules and food safety in terms of pesticide residues in animal and non-animal products and veterinary drug residues in animal products |
| **Necessity for transnational regulation** | No |
| **Instrument for implementation/** **implementation** | * Technical
* Policy
* Legislative
 |
| **Spatial reference/implementation zones** | Territorial waters/EEZ |
| **Contribution of the measure to achieving the target**  | The measure will have a low contribution for achieving the targets related to the D9. |
| **Transboundary impact** | 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. The measure will have positive effect on stimulation of aquaculture producers to use ecofriendly technologies. |
| **Costs** | **First rough assessment:** medium 50,000-1,000,000 euroAdministrative costs for following actions: * Working group from:[[1]](#footnote-1) 10.000 €
* Consultation with wider relevant authorities, sectors and stakeholders & Legislative revision if necessary and adoption: 17.000 €
* Stepwise implementation of chosen ecolabels by the fishery sector: BG: 105.000€; RO: 43.000 €
* Public awareness campaigns costs (renting of premises, catering, promotion materials) + Public Information campaigns as various tools as brochures, media, internet links : 50.000 €

Total one off costs within MSFD cycle (6 years):182.000€ (BG) & 120.000€ (RO) |
| **Effectiveness** | Potentially strong |
| **Indicator(s) to measure effectiveness** | 1. General increase of seafood consumption in the short, medium and long term (kg / year ton / year);
2. General increase of seafood consumption with ecolabels in short, medium and long term (kg / year tons / year)
 |
| **Socio-economic assessment** | **Cost Effectiveness Assessment: moderate****Cost Benefit Assessment: medium****Negative side effects:**This could have a negative effect on the rest of the business, which cannot provide the necessary quality of their seafood products and are not authorized to use the ecolabeling (Increase of the “grey economy”).**Benefit:**1. The fishing sector will themselves choose to introduce ecolabeling if there is such demand. It depends on the type of labels and what the benefits for the environment potentially could be. Introduction of ecolabelling is relevant for local fish markets and those for export. 2. Raising public awareness about the products offered on the market and the possibility of choice, general increase of consumption of marine products from the population. *(periodic statistics of sea food offered in markets and consumer preferences);*3.Increasing the profits of firms offering products with a sign of good quality (ecolabel).  |
| **Coordination** | National Bilateral |
| **Technical feasibility** | * New development
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| **Body responsible for the measure implementation** | Bulgaria: Ministry of Agriculture and Food, National Agency of Fisheries and Aquaculture (NAFA), Bulgarian Food Safety Agency (BFSA), Ministry of Health and Regional Health Inspections Dobrich, Varna and BurgasRomania: Ministry of Agriculture and Rural development, including National Sanitary Veterinary and Food Safety Authority |
| **Financing opportunities** | Public funds; EU projects (i.e RO-BG CBC Program, Horizon 2020 Program, EMFF) |
| **Planning of implementation/temporal coverage** | **2018** |
| **Difficulties in implementation** | Yes – possible reluctance of some producers/fishermen related to high cost, inadequate management support, paucity of data and impact on trade.  |
| ***Supporting information for SEA*** |
| **Additional values for protection (outside MSFD)** |  |
| **Reasonable alternatives** |  |

1. At national level: state experts and experts from sector fishery (aquaculture producers) with aim of checking the existing European and national legislation related to ecolabelling, development of proposals for such aquaculture labels. At supranational level: bilateral meetings between Bulgaria and Romania for coordination of proposals and approval. [↑](#footnote-ref-1)