

**Regional Meeting on NAPs
implementation – Lessons
learned and the way forward
Marseille, 17-18 October 2016**



Updated National Action Plans/POM of Bosnia and Herzegovina

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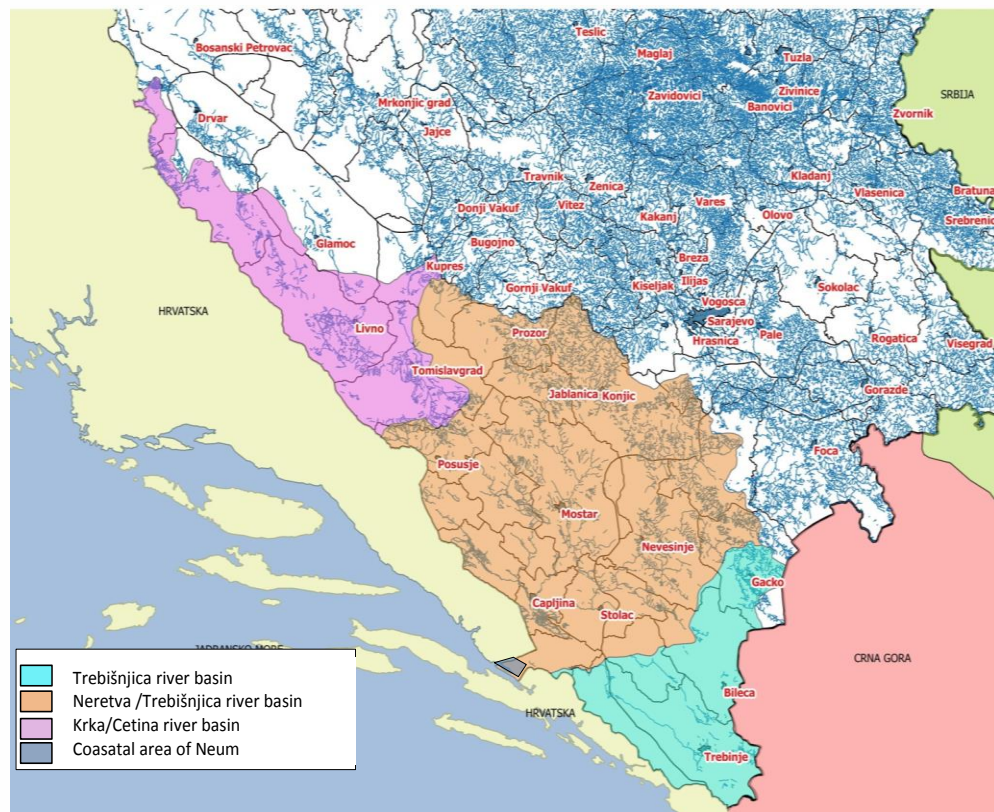
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Focus of Updated NAPs/POM

- three river basins + coastal area
- two entities - with the different institutional authorities - no national body with priority in protection of environment in general
- Three Ecological Objectives

EO5 (Eutrophication): pollution by organic matter and nutrients
EO9 (Contaminants): Heavy metals, POPs and Mercury
EO10 (Marine litter): Marine litter



Requirements of the Ecosystem Approach targets and Regional Plans in the framework of SAP-MED

- Strategic Action Programme (SAP-MED), 1997.
- Decision IG.19/7 “Regional Plan on the Reduction of BOD₅ from Urban Wastewater”.
- Decision IG.19/8 “Regional Plan on the Elimination of Aldrin, Chlordane, Dieldrin, Endrin, Heptachlor, Mirex and Toxaphene”.
- Decision IG.19/9 “Regional Plan on the Phasing Out of DDT”.
- Decision IG.20/8.1 “Regional Plan on the Reduction of Inputs of Mercury”.
- Decision IG.20/8.2 “Regional Plan on the Reduction of BOD₅ in the food sector”.
- Decision IG.20/8.3.1 “Regional Plan on the Elimination of Alpha hexachlorocyclohexane; Beta hexachlorocyclohexane; Hexabromobiphenyl; Chlordecone; Pentachlorobenzene; Tetrabromodiphenyl ether and Pentabromodiphenyl ether; Hexabromodiphenyl ether and Heptabromodiphenyl ether; Lindane; Endosulfan, Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride”.
- Decision IG.20/8.3.2 “Regional Plan on the Phasing out of Lindane and Endosulfan
- Decision IG.20/8.3.3 “Regional Plan on the Phasing out of Perfluorooctane, Sulfonic Acid, its salts and Perfluorooctane Sulfonyl Fluoride
- Decision IG.20/8.3.4 “Regional Plan on the Elimination of Alpha hexachlorocyclohexane, Beta hexachlorocyclohexane, Chlordecone, Hexabromobiphenyl, Pentachlorobenzene
- Decision IG.20/9 “Criteria and Standards for bathing waters quality”.
- Decision IG.20/10 “Adoption of the Strategic Framework for Marine Litter Management”.
- Decision IG.21/3 on the Ecosystems Approach including Adopting Definitions of Good Environmental Status (GES) and Targets.
- Decision IG.21/7 “Regional Plan on Marine Litter Management in the Mediterranean”.



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| no. | SAP | requirement |
|--|-----|--|
| | RP | |
| Requirements for pollution prevention and control measures | | |
| EO5 | | Promotion of separate collection of rain waters and municipal wastewaters [deadline not specified] |
| EO5 | | Promotion of reuse of treated effluents for the conservation of water resources [deadline not specified] |
| EO5 | | Coastal cities and urban agglomerations of more than 100,000 inhabitants are connected to a sewer system [deadline passed] |
| EO5 | | Take necessary measures to establish adequate urban sewer and wastewater treatment plants that prevent run-off and riverine inputs of litter [deadline 2020] |
| EO5 | | Ensure that all agglomerations of more than 2000 inhabitants collect and treat their urban wastewater before discharging them into the environment [deadline 2019] |
| EO5 | | Prevention of direct and indirect effects of nutrient over-enrichment in the marine environment [Deadline 2015] |
| EO5 | | Reduce nutrient inputs, from agriculture and aquaculture practices into areas where these inputs are likely to cause pollution [deadline 2025] |
| EO5 | | Industrial Food Plants outlined in Appendix I which discharge more than 4000 PE into water bodies shall meet the following requirements: COD 160 mg/l or TOC 55 mg/l and BOD 30 mg/l [deadline 2014] |
| EO5 | | Dispose all wastewater from industrial installations which are sources of BOD, nutrients and suspended solids [deadline 2025] |
| EO9 | | Application of BAT and BEPs for environmentally sound management of POPs [deadline passed] |
| | | Concentration of priority contaminants in biota, sediment or water is |

Around 80 requirements were considered

Objectives for Updating the NAPs

Main objectives for B&H NAPs update is

- To identify pressures through NBB**
- midterm baseline assesment**
- Identify gaps beetween MBA and SAP/Regional plans requirements**
- To identify Objective targets and measures**
- To give prioritetisation of measures and select up to top priority 15 projects**



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NAP Update - administration

Procedure for the establishment of National Steering Committee started in June 2015 – ended in december 2015 because of extremely slow administration procedure

- Even though NSC was not formally established, very good cooperation with the proposed experts from the competent water management agencies was established;
- Three thematic groups for each EO - three meetings with the thematic group (TG) were organised
- Final workshop – January, 2016



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NAP Update - administration

Main Stakeholders:

- Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina, Sarajevo;
- Adriatic Sea Watershed Agency in Mostar;
- Public institution “VodeSrpske”, Sector of the Trebišnjica River Basin, Trebinje.
- Public Utility Company MAR-ECO Neum

Main Sources of information:

- Mediterranean Sea River Basin Management Plan – B&H
- Results from IPA Adriatic project - DeFishGear
- National strategic and plan documentation related to waste and wastewater.



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Content of Updated NAPs

1. Midterm baseline assesment – related to SAP/regional plan requirements
2. Identification of gaps/issues
3. Definition of quantifiable operational targets,
4. Programm of meassures
5. Project fishee
6. Development of the NAP follow-up and reporting plan, and



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| Hot Spots | Prioritisation indicators |
|-----------------|--|
| Mostar | The only agglomeration with more than 100000 inhabitants, and treatment of waste water, and regulated collection and disposal of waste according to EU standards. |
| Neum | The only municipality located in the Mediterranean coastal area of B&H, without proper treatment of water, collection and disposal of waste according to EU standards, and with significant pressure of fisheries. |
| Čapljina | Waste water management, trans-boundary impact, specially related to solid waste management and production of marine litter in delta of Neretva. |
| Trebinje | Waste water management, trans-boundary impact specially related to solid waste management , and collection and treatment of leachate. |

| Operational targets | Sectors | EO5 | EO9 | EO10 |
|--|---|-----|-----|------|
| <i>Legislation and strategic documents are reviewed and harmonized to international standards level- until 2021</i> | <i>all</i> | X | X | X |
| <i>Separate collection of waste 50 % of all waste before 2025 including packing waste (55% of total amount for paper, 40% for glass, 65 %for the metal, 15 % for plastic)</i> | <i>Solid waste</i> | | | X |
| <i>Institutional and technical staff is effectively able to cope with POPs management issues</i> | <i>Waste water and industrial pollution</i> | | X | |
| <i>Establish an effective monitoring strategy for diffuse pollution from agriculture and aquaculture - until 2019</i> | <i>Waste water</i> | x | | |
| <i>Facilities for the collection and disposal of urban, mining and industrial waste are adequate to modern standards_2020</i> | <i>Solid Waste</i> | | | x |
| <i>The establishment of economic measures for environmental protection and implementation of the Stockholm Convention</i> | <i>Waste water and industrial pollution</i> | | x | |
| <i>Sewerage and WWTP:</i> <i>a) Increase total population connected to sewage system to 50 % by 2019 and 70 % by 2025;</i> <i>b) Reconstruct 25% of the existing sewerage by 2019 and 50% by 2025.</i> <i>c) Moving from mixed systems to separate systems where feasible and adopting best storm water practices to minimize impact where mixed systems have to be retained.</i> <i>d) Increase the population served by a WWTP to 30 % by 2019 and 50 % by 2025 (construction of new WWTPs and rehabilitation/improvement of exsisting WWTPs capacities)</i> | <i>Waste water</i> | x | | |

Priority Measures

- 84 Measures:
- 10 legal
- 9 Institutional
- 14 Policy
- 7 economic
- 44 technical

30 measures after prioritisation
26 measures after economical
analyses

12 – top priority - project fisheries



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Priority Measures

| Measure categories | Number of measures | Relevance to EO | | |
|---|--------------------|-----------------|-----|------|
| | | EO5 | EO9 | EO10 |
| Legal: Development of the national legislation for marine litter monitoring methodology and management strategy by 2017 | 3 | 1 | 2 | 1 |
| Institutional : Ensuring an adequate hazardous waste management system (with a focus on waste containing POPs substances) and contaminated areas. | 1 | | 1 | |
| Policy :Development of the national monitoring program with identified definitions, monitoring methodology and management strategy by 2018 | 2 | 1 | | 1 |
| Economic: Development of economic tools which would make disposal of inert wastes more competitive | 1 | | | 1 |
| Technical :Construction of the sanitary landfill adequate for EU standards for the Municipalities of Trebinje and Ljubinje with designated location for for disposal of inert wastes - up to 2020 | 19 | 12 | 7 | 5 |

List of indicators

| Ecological Objectives | Indicators |
|-----------------------|--|
| Eutrophication | <ol style="list-style-type: none"> 1. % of urban waste water discharges from WWTP covered by monitoring program 2. Common indicator : WW01. Share of population with access to an improved sanitation system (total, urban, rural). 3. Common indicator : WW03. Wastewater treated (in population equivalent) 4. Data base with industries over 4000EBS fully established |
| Contaminants | <ol style="list-style-type: none"> 1. ECAP Common Indicator 14- - IND05. Number of substances covered by national standards (ELV) for point source discharges into water or air. 2. POPs in waste management plan |
| Marine litter | <ol style="list-style-type: none"> 1. ECAP Common Indicator 16/[MW01] Trends in the amount of litter washed ashore and/or deposited on coastlines, including analysis of its composition, spatial distribution and, where possible, source. 2. [ECAP Common Indicator 17/[MW02] Trends in the amount of litter in the water column including microplastics and on the seafloor. 3. Common indicator- Share of generated municipal waste per waste composition category: paper/paperboard, textiles, plastics, glass, metals, other inorganic material, organic material. 4. Common indicator- Share of generated municipal waste per waste composition category: paper/paperboard, textiles, plastics, glass, metals, other inorganic material, organic material. 5. Share of population with access to an improved sanitation system of waste collection and disposal. 6. Common indicator - MW07. Number of illegal dumpsites at coastal area that have been closed/remediated over the past 10 years. |

Project Fiches

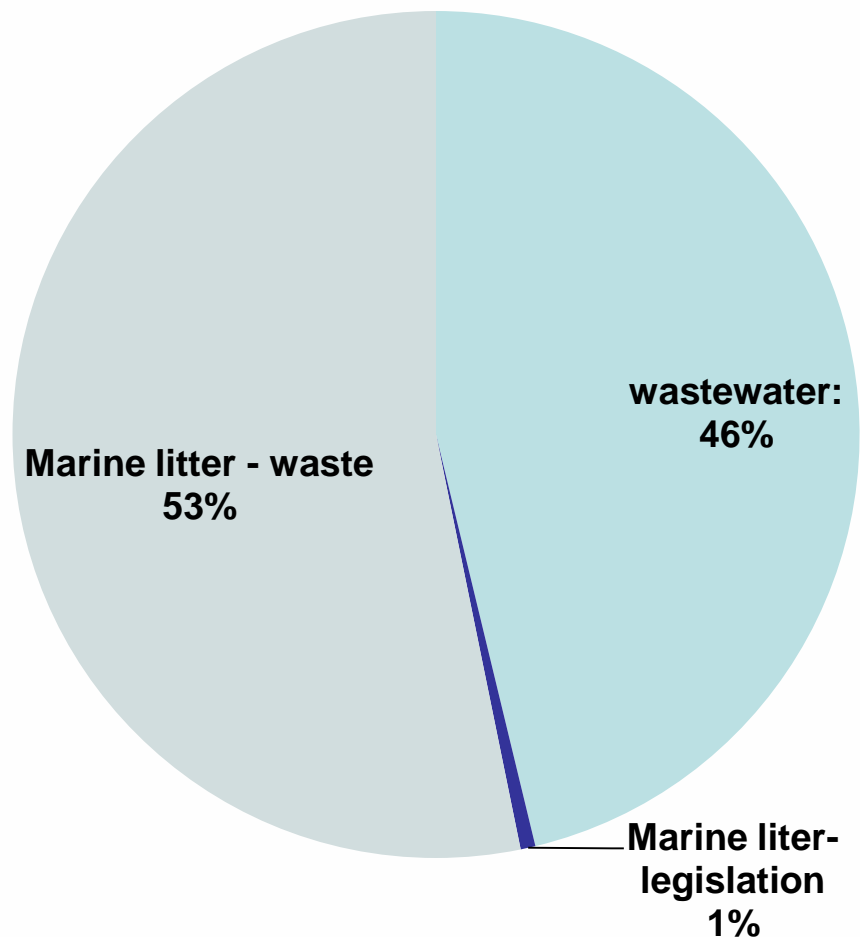
| Title | Objectives - operational targets to overcome gaps | Relevant Ecological Objectives | | |
|--|--|--------------------------------|-----|------|
| | | EO5 | EO9 | EO10 |
| Development of the national legislation for marine monitoring methodology and management strategy that will include beside sea water, also monitoring of marine litter, sediment and biota by 2019 | Legislation and strategic documents are reviewed and harmonized to international standards level- until 2019 | | | x |
| Development of the national monitoring program for Mediterranean area B&H focusing on marine environment and protection by 2019 | Legislation and strategic documents are reviewed and harmonized to international standards level- until 2019 | | | x |

| Title | Objectives - operational targets to overcome gaps | Relevant Ecological Objectives | | |
|--|--|--------------------------------|-----|------|
| | | EO5 | EO9 | EO10 |
| Agglomeration with a population larger than 100.000. Extend existing sewerage to achieve 90% connection coverage for the city of Mostar | Sewerage and WWTP: a) Increase total population connected to sewage system to 50 % by 2019 and 70 % by 2025; b)Reconstruct 25% of the existing sewerage by 2019 and 50% by 2025. c) Moving from mixed systems to separate systems where feasible and adopting best storm water practices to minimize impact where mixed systems have to be retained. d)Increase the population served by a WWTP to 30 % by 2019 and 50 % by 2025 (construction of new WWTPs and rehabilitation/improvement of existing WWTPs capacities) | x | | |
| Agglomeration with a population between 10.000 and 100.000. Extend existing sewerage to achieve an average 50% by 2019 and 70% by 2023. | | x | | |
| Complete the construction testing and commissioning of the WWTP in Mostar by 2019; Provide disinfection of WWTP effluent prior discharge into recipients used for recreational purpose | | x | | |
| Complete the construction testing and commissioning of the WWTP in Čapljina by 2023 | | x | | |
| Construction of operational biological treatment units for secondary treatment of waste water on WWTP Neum by 2022; Provide disinfection of WWTP effluent prior discharge into recipients used for recreational purpose | | x | | |
| Gradual increase of Trebinje WWTP operational capacity - from 16000 ES to 23000 ES by 2020 and from 23000 ES to 30000 ES by 2025; Provide disinfection of WWTP effluent prior discharge into recipients used for recreational purpose; | | x | | |

Project Fiches

| Title | Objectives - operational targets to overcome gaps | Relevant Ecological Objectives | | |
|--|---|--------------------------------|-----|------|
| | | EO5 | EO9 | EO10 |
| Construction of the sanitary landfill adequate for EU standards for Mostar. This landfill will accept also urban wastes from municipalities Jablanica, Konjic, Čitluk, Čapljina, Stolac, Ravno with designated location for disposal of inert wastes - up to 2020 | Facilities for the collection and disposal of urban, mining and industrial waste are adequate to EU standards_2020 | | x | x |
| Immediate closure of the illegal landfills in trounsboundary area_up to 2019 | | | | x |
| Construction of the sanitary landfill adequate for EU standards for the Municipalities of Trebinje and Ljubinje with designated location for disposal of inert wastes - up to 2020 | | | x | x |
| Establish a system (competent waste management companies, infrastructure for collection of urban waste, management schemes for collection/separation /reuse/safe disposal of separate waste fractions) for municipalities with more than 10.000 (50% of municipalities 2019, 95% of municipalities until 2025) | Separate collection of waste 50 % of all waste before 2025 including packing waste (55% of total amount for paper, 40% for glass, 65 %for the metal, 15 % for plastic) | | | x |

Project Fiche Breakdown



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**Thank you
for your
attention!!**

Questions?



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