

RESPONSE

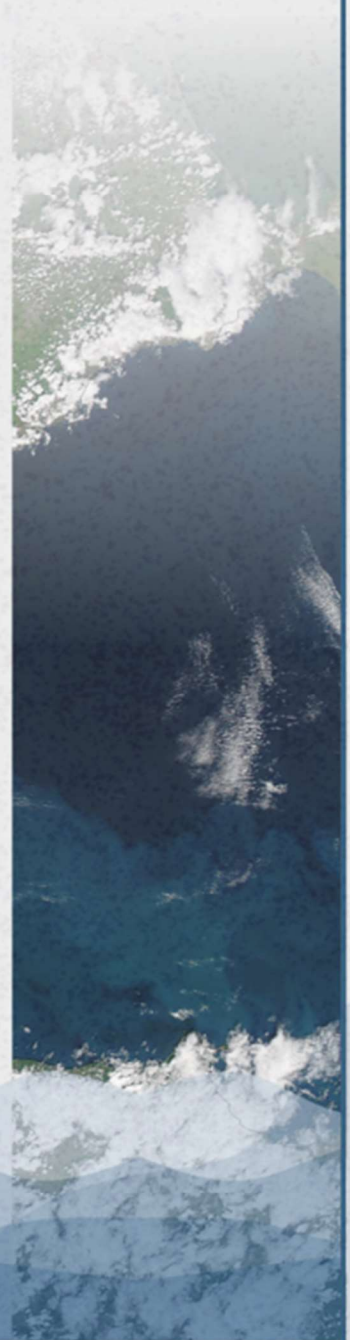
Building Response Frameworks under existing
& new Marine Pollution Challenges in the Black Sea



Milestone 3

Initial plans for co-creating curricula

**(Plan of the stakeholder's engagement in the training
curricula co-creation process)**



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Project background and context

The RESPONSE, supported by the European Union EMFAF, under Grant Agreement no 101124661 has duration of 36 months, starting from 01.10.2023. The project consortium involves six partners from five different countries: Greece, Bulgaria, Romania, Ukraine and Georgia. Five of the participants are based in countries bordering on the Black Sea, and the lead beneficiary, the Aristotle University of Thessaloniki (AUTH), has a long history of working with the region and with members of the consortium. The partnership includes one university, two research institutes and three environmental NGOs: the Black Sea NGO Network (BSNN) regional NGO network based in Varna, Bulgaria; the National Institute of Marine Research and Development (NIMRD), based in Constanta, Romania, leading research institute for the Black Sea; the Institute of Market Problems and Economic-Ecological Research (IMPEER), Odesa, a public institution, part of the National Academy of Sciences of Ukraine; the Black Sea Branch of Ukrainian Environmental Academy of Sciences (BSBUEAS) is Odesa-based NGO with a team of professional researchers; and the Greens Movement of Georgia / Friends of the Earth (GMG/FoE) – Georgia, an NGO, part of the international environmental network. All three beneficiaries from EU Member States have extensive experience in marine pollution projects under the Horizon 2020 and Horizon Europe programmes.

RESPONSE aims to identify and promote the development and establishment of new-generation advanced training schemes and curricula to support early warning, region-wide mechanisms for monitoring natural and man-made disasters. Various training programs, platforms and curriculum have been implemented to monitor marine pollution and ensure knowledge integration and dissemination. Still, training material, best practices, standards and protocols often differ among platforms and programs, hindering progress towards implementing an integrated, transdisciplinary and multidisciplinary marine pollution training system. Peculiar events, such as armed conflicts, create new environmental and societal challenges that call for international, coordinated responses.

RESPONSE acknowledges the importance of deeper understanding of marine ecosystems and river-delta-sea connections, the need for development of harmonized procedures, standards and methodologies in marine monitoring across the Black Sea countries to support healthy and resilient seas and foster integrated marine governance. The sustainable changes that are required for the establishment of efficient, advanced training schemes that would be integrated with the challenges, goals and specificities of the scientific and social context and make the most of the untapped capacity of stakeholders to promote regional awareness in the field.

In view of the background and context described above, the four overarching objectives of RESPONSE are: 1) IDENTIFY and UNDERSTAND the institutional and societal gaps and needs for effective, integrated, transdisciplinary and multidisciplinary marine pollution training systems; 2) DEVELOP effective training programs by assembling, integrating, and improving the most promising approaches and results into a comprehensive framework that consists of a set of methodological training tools, databases, policy recommendations, and background information; 3) SUPPORT the implementation of the EU and Regional Strategies, by developing operational guidelines for effective application, updating, monitoring and management of training programs on marine pollution; 4) EMPOWER marine pollution training, monitoring and mitigation by involving, inspiring and influencing stakeholders through a *broader vision of co-design, co-creation, co-establishment, co-implementation and co-assessment of the training programs.*

Executive summary

In Milestone 3, we will develop a detailed plan outlining the expected progress in WP2. This will include a step-by-step approach to the complex task of preparing the training curricula for the key stakeholders involved in activities related to establishing early warning systems and region-wide mechanisms for monitoring natural and man-made disasters leading to marine pollution.

The plan will focus on a gradual development of the key phases, ensuring the necessary input is provided for stakeholders to assimilate new marine pollution research technologies. These technologies will have applications in both mitigation efforts and emergency situations/operational services.

The plan will be based on a critical analysis of the current programs, tools, and training platforms identified in the Black Sea riparian countries, all with the goal of enhancing the region's capacity to respond to marine pollution events in the Black Sea.

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1. Introduction

Aim of Milestone: Plan of the stakeholder's engagement in the training curricula co-creation process

Activities:

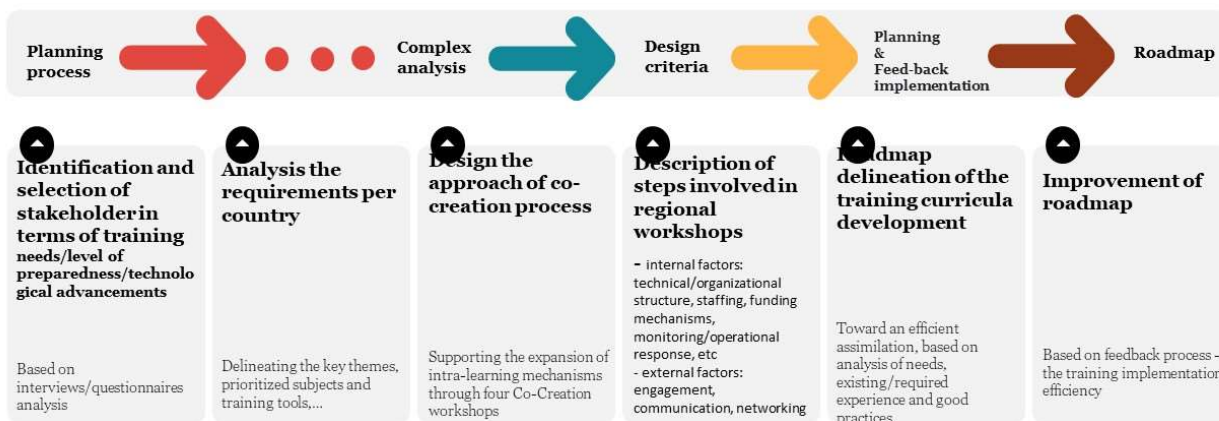
- Analyzing (co-creation) inputs from regional interviews/questionnaire, in relation with recent scientific and technological advancements
- Identification of definite requirements per country and selection the principal stakeholders who are suitable for participating in the co-creation and evaluation of advanced training curricula, in alignment with their specific needs
- Identification of key themes, prioritized subjects, and training tools to be tailored/adapted to the specific needs and capacities of the regional stakeholders
- Planning the approach for efficient assimilation and support to the expansion of intra-learning mechanisms through four Co-Creation workshops: questionnaire, subjects' lists, on stakeholders' preferences
- Delineate the steps in training curricula development, based on critical analysis of needs, existing institutional/legal framework, good practices, and level of expertise/experience/preparedness/operational capacity, related to stakeholders within the Black Sea marine spaces, belonging to the countries involved in the project, considering the feedback process on the training implementation efficiency

Expected outputs

1. Schemes of the steps involved in the development of the training curricula tailored to the specific profile of each stakeholder within their BS country/(sub-basin scale) areas of interests/works
2. Plan of the regional workshops to assist the co-designing process aiming to cover:
 - a. internal factors: technical/organizational structure, staffing, funding mechanisms, monitoring/operational response, etc.
 - b. external factors: engagement, communication, networking etc.
3. Roadmap for the development of transferable trainings curricula, with the aim of adopting and implementing in other BS countries over the project timeline, in the long-term.

2. Scheme of process development

Planning Scheme of the co-creation Training Curricula process



3. Plan of the co-creation workshops to assist the co-designing process

Planning of four national and one regional workshop for co-creation of training curricula will encompass a gradual development double process of integration:

- internal factors: technical/organizational structure, staffing, funding mechanisms/sponsoring, monitoring/operational response to:
- external factors: engagement, communication, networking etc.

Bulgaria – first co-creation workshop planned for 1st November 2024 in Varna, in collaboration with administrations, scientific institutions, academia and volunteer groups

Georgia – Initial discussions to finalize the format and plan for the co-creation workshop will be held on 10th October 2024, alongside the DOORS Black Sea System of Systems workshop. The aim is to agree with stakeholders the location and date for the RESPONSE co-creation workshop, which is tentatively scheduled for 1st November 2024 in Poti. The RESPONSE co-creation workshop will involve participants from marine and coastal administrations, scientific and education institutions, NGOs, and public representatives.

Romania – First workshop feasible planned for 25th of October within Marblue 2024 Conference in Constanta, organized by NIMRD in collaboration with Ovidius University and GeoEcoMar, or 31st of October, The Black Sea Day, organized by NIMRD, in Constanta

Ukraine – first co-creation workshop planned for 20th November 2024 in Odesa, Ukraine, SO IMEER NASU in collaboration with UKRSCES and BSB UEAS.

Possible calendar of national co-creation workshops: M12, M13, M16 and the regional one: M16.

4. Roadmap for the development of transferable trainings curricula with the aim of adopting and implementing in other BS countries over the long-term

STAGES in the co-creation process of the training curricula

- I. **Selection of the Stakeholders for co-creation process**, based on the complex assessment of the national institutional and legislative framework, as well as needs reflected in the questionnaire/interviews
 - Bulgaria - identified needs of stakeholders in the process of consultations, opinion survey, interviews, co-creation at local meetings, workshops: training on topics like marine pollution preparedness and response, marine pollution sources and types, emerging pollution types, and monitoring in relation to the Marine Strategy Framework Directive (MSFD); training on scientific advances, technological and ICT monitoring tools, remote sensing, ecological modelling, risk assessment etc.; technical and financial support for preparedness and response training and exercise for all administrations and people involved in the National Disaster Risk Reduction Program 2021 – 2025, National Oil Spill Contingency Plan in the Black Sea, National Sea Rescue Plan in the Bulgarian Maritime Search and Rescue Response Area etc.; plan/s with measures and financial support for emergency response to pollutants to pollutants/contaminants different from oil; training on mitigation prevention measures, data exchange, professional networking, open data platforms use etc.
 - Georgia – stakeholder and training needs were identified through online surveys and consultations, focusing on marine pollution monitoring and control, data sharing needs, and the use of open data platforms to support MSFD requirements, with attention to various MSFD descriptors. Additionally, training capacities were outlined for the implementation of emergency response measures to marine incidents, with a particular emphasis on preventing and responding to oil spills, chemical pollutants, plastic waste impacting beaches and the marine environment, sewage pollution, ballast water management, etc.
 - Romania – identified needs in co-creation consultations within Local/National Workshops: Implementation of MSFD – marine pollutions descriptors (D5, D8-11) - training support, Marpol conventions implementation – training support for all authorities involved in Contingency plan in case of MP, but also Research, Academia and NGOs.
 - Ukraine – identified stakeholders and their needs in the process of consultations, opinion survey, interviews; training on mitigation prevention measures, data exchange, professional networking, open data platforms use etc. Identified needs in co-creation consultations within Local/National Workshops: Implementation of MSFD – National Marine Strategy and Acting Plan. Design of the plan of trainings dedicated to implementation of measures of emergency response under the influence of military actions and considering restrictions under martial law.
- II. **Identification of the existent or needed trainings on Marine Pollution**, as well as need of databases/tools/procedures in relation with Challenges of continuous developing accurate

MP training for specific stakeholders in the Black Sea

- Marine Pollution Management
- Marine Pollution Monitoring/Modeling (Research) - Monitoring/Observational gaps and associated downstream services.
- Marine pollution Science Applications
- Infrastructure and procedure
- Existence of legal framework/contingency plans
- Critical review existent Training curricula in Marine pollution
- First national workshop

III. Delineation of the Requirements for an adequate/open training schemes to support MP rapid response in Black Sea, based on specific criteria at national/regional level

- Essential, basic and advanced trainings subjects (list of the inclination subjects)
- Prioritizing the training themes/content/timeline towards a complete training curriculum supporting the development of Marine Pollution Response training for the main stakeholders in the Black Sea areas/riparian countries
- Integration of observational requirements (specific technologies of earth observations)/ into the MP's monitoring-modeling-management associated activities - Integration of the new technologies for monitoring & rapid response: Remote sensing/EO, modeling/etc.
- Future developments/tools/inputs in the training curricula / Co-creation of the training syllabus (according with the learning outcomes) - New monitoring-modeling-management technologies input in Marine pollution management

IV. Learning/Teaching Methods

- Choosing the appropriate instructional methods adapted (for specific stakeholders): at the regional/transboundary/country level virtual, e-learning, info tools
- Problem- based learning in MP training

V. Transfer of project results adaptation of each BS stakeholder through distinctive pilots' programs for specific stakeholders/target groups

- Requirements for a training curriculum to support continuously/on long-term basis the development of Marine Pollution Response/preparedness & operational tools for networking and feedback.
- 2nd national Co-creation Workshop within its project task

VI. Testing and Compliance review

- Quality/Key performance indicators validation based on users/beneficiaries' feedback
- Quality Assurance and Quality Improvement (e.g. with Quality Excellence validation tool) of training curriculum program for its accreditation
- 3rd national Co-creation Workshop within its project task

VII. Finalizing the training curricula design for different sectors of activity, levels of preparedness, roles in emergency situations/contingency national plan.

- Integration of educational/scientific resources/tools into specific training activities

requirements for Marine Pollution Response.

- New extended and improved procedures for rapid and adapted response to MP
- Periodic exercises/tests for Procedures and Tools especially for rapid Response interventions.
- 4th/ Regional Co-creation Workshop, within its project task

5. Synthesis

The initial plan was extended base on project cycling principles encompassing certain sensible stages in the co-creation process of the training curricula. The resulting roadmap describe in concentrated way the development for the next work package(s) and its successive tasks.