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**Improving Environmental Monitoring in  
the Black Sea – Selected Measures  
(EMBLAS-Plus)**

**ENI/2017/389-859**

**1<sup>ST</sup> PROGRESS REPORT**

**5 March 2018 – 30 November 2019**

This document has been prepared in the frame of the EU/UNDP Project: Improving Environmental Monitoring in the Black Sea– Selected Measures (EMBLAS-Plus) – Delegation Agreement ENI/2017/389-859

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## Abbreviations

ACCOBAMS	Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area
ANEMONE	Assessing the vulnerability of the Black Sea marine ecosystem to human pressures
APENA	Support to Ukraine in approximation of the EU environmental acquis
BENTHOX	Understanding coastal hypoxia and its consequences on benthic-pelagic exchanges, diagenesis and ecosystem functioning (Belgium Research Project)
BS WQD	Black Sea Water Quality Database
BSC	Black Sea Commission (Commission on the Protection of the Black Sea Against Pollution)
BSEC	Black Sea Economic Cooperation
BSIS	The Black Sea Information System
BSIMAP	Black Sea Integrated Monitoring and Assessment Programme
BSS	Black Sea Synergy
BSSP	Black Sea Specific Pollutants
BS SAP	Black Sea Strategic Action Plan
BS WQD	Black Sea Water Quality Database
CBC	Cross-border Cooperation
CeNoBS	Support MSFD implementation in the Black Sea through establishing a regional monitoring system of cetaceans (ACCOBAMS project)
CIS	Commonwealth of Independent States
CFP	Call for Proposal
CO	Country Office
CSO	Civil Society Organisation
DCT	Data Collection Templates
DG	Directorate-General
DG NEAR	Directorate-General for Neighbourhood and Enlargement Negotiations
DoA	Description of Action
DQC	Data Quality Control
EC	European Commission
EEA	European Environment Agency
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
EMBLAS	Improving Environmental Monitoring in the Black Sea
EMODNET	European Marine Observation and Data Network project
ENI	European Neighborhood Instrument
ENP	European Neighborhood Policy
EU	European Union
EUD	European Union Delegation
EUWI+	European Union Water Initiative Plus (EU project)
FSTP	Financial Support to Third Parties
GeoEcoMar	National Institute of Marine Geology and Geoecology (Romania)
GE	Republic of Georgia
GEF	Global Environment Facility
GES	Good Environmental Status
IA	Initial Assessment
ICBSS	International Centre for Black Sea Studies
ICES	International Counsel for the Exploration of the Sea

ICPDR	International Commission for the Protection of the Danube River
ICZM	Integrated Coastal Zone Management
IMB	Institute of Marine Biology
IMP	Integrated Maritime Policy
IPCHEM	Information Platform for Chemical Monitoring
IRH	Istanbul Regional Hub
JDS	Joint Danube Survey
JRC	Joint Research Centre
JBSS	Joint Black Sea Surveys
JOSS	Joint Open Sea Survey
MARLENA	Marine and River Litter Elimination New Approach (EU Black Sea CBC)
MARLITER	Improved online public access to environmental monitoring data and data tools for the Black Sea Basin supporting cooperation in the reduction of marine litter (EU Black Sea CBC project)
MENRP	Ministry of Environment and Natural Resources Protection (Russian Federation)
MENR	Ministry of Ecology and Natural Resources (Ukraine) <sup>1</sup>
MEEP	Ministry of Energy and Environment Protection (Ukraine)
MEPA	Ministry of Environment Protection and Agriculture (Georgia)
MISIS	MSFD Guiding Improvements in the Black Sea Integrated Monitoring System project (EU project)
ML	Marine Litter
MONINFO	Monitoring and Information Systems for Reducing Oil Pollution (EU research project)
MSFD	EU Marine Strategy Framework Directive
MWM-GMR	Waste Free Rivers for a Clean Black Sea
N-BSIMAP	National Black Sea Integrated Environmental Monitoring and Assessment Programme
NEA	National Environmental Agency
NGO	Non-governmental organisation
NIVA	Norwegian Institute for Water Research
NMS	National Monitoring Surveys
NPMS	National Pilot Monitoring Studies
ONU	Odessa National I.I. Mechnikov University
QA/QC	Quality Assurance / Quality Control
PA	Project Activity
PCO	Project Coordination Office
PERSEUS	Protecting European Seas and Borders through the Intelligent Use of Surveillance (EU FP project)
PMT	Project management Team
POPP	Programme and Operations Policies and Procedures
RBEC	Regional Bureau for Europe and the Commonwealth of Independent States
RECETOX	Research Centre for Toxic Compounds in the Environment
RedMarLitter	Innovative techniques and methods for reducing the marine litter in the Black sea coastal areas (EU Black Sea CBC project)
RDB-P	Regional Database on Pollution
RIMMEL	Monitoring of the riverine floating and marine litter methodology and related mobile application (EC JRC)

<sup>1</sup> Ministry of Ecology and Natural Resources has been merged with Ministry of Energy and Coal Mining into new Ministry of Energy and Environment Protection, as of 29 August 2019

RF	Russian Federation
ROV	Remotely Operated Vehicle
RP	Responsible Party
RTA	Regional Technical Advisor
RV	Research vessel
SC	Steering Committee
SEA	Strategic Environmental Assessment
SeaDataNet	Pan-European Infrastructure for ocean and marine data management
SEIS	Towards a Shared Environmental Information System (EEA regional programme)
SIO RAS	Shirshov Institute of Oceanology, Russian Academy of Sciences
SOI	State Oceanographic Institute (Russian Federation)
SOP	Standard Operating Procedure
STE	Short-term expert
SWMI	Black Sea Significant Water Management Issues
ToR	Terms of Reference
TSU	Iv. Javakhishvili Tbilisi State University (Georgia)
UA	Ukraine
UAV	Unmanned Aerial Vehicle
UkrSCES	Ukrainian Scientific Center of Ecology of the Sea (Ukraine)
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WISE	EEA Water Information System for Europe
WFD	EU Water Framework Directive
WQD	Water Quality Database
WQ	Water Quality
ZEWSGES	Zero Waste Strategy For Good Environmental Status (EU Black Sea CBC project)

## Executive Summary

The present document is the 1<sup>st</sup> Progress Report of the EU-UNDP Project "Improving Environmental Monitoring in the Black Sea - Selected Measures" (EMBLAS-Plus), directly implemented by UNDP Istanbul Regional Hub for Europe and the Commonwealth of Independent States (CIS). The document provides an overview on progress during the period 5 March – 30 November 2019 and describes the planned project activities to be carried out until the end of the implementation period - 4 September 2020, as per the EU-UNDP Delegation Agreement ENI/2017/389-859.

### **Project background and objectives**

The Black Sea ecosystems are extremely vulnerable to pressures from human activities and have suffered important decline in the past. There is a number of environmental challenges in the Black Sea Basin that are shared by riparian countries, including two members of the European Union (EU). In the EU, these challenges have received increased political attention and commitment, including through policy dialogue conducted within the Black Sea Commission and the Bucharest Convention.

In order to help its Eastern neighbors to improve the protection of the Black Sea environment, the EU has provided support to specific activities on the ground. The Project "Improving Environmental Monitoring in the Black Sea" (EMBLAS) is one of such activities.

EMBLAS-Plus is building on the results of the two previous project phases (EMBLAS-I and II (2013-2018)) funded by the EU and UNDP, designed to tackle deficiencies and limitations in the availability of accurate, reliable, and comparable data on marine environment, as well as to build capacities of the involved countries to perform integrated environmental monitoring and assessment of the Black Sea according to the MSFD, WFD and the needs of the Black Sea Strategic Action Plan adopted by Black Sea countries in 2009. EMBLAS-Plus has extended focus on environmental protection, the marine litter monitoring and reduction through local small-scale actions targeted at pollution by marine litter, public awareness raising and education.

**The overall objective** of the EMBLAS-Plus project is to help improve protection of the Black Sea environment. This objective will be pursued through further technical assistance focused on marine data collection and local small-scale actions targeted at public awareness raising and education, and clean-up activities.

**The specific objectives** are as follows:

- i) Improve availability and sharing of marine environmental data from the national and joint regional monitoring programmes aligned with the MSFD and WFD principles and the Black Sea Integrated Monitoring and Assessment Programme (BSIMAP);
- ii) Support joint actions to reduce river and marine litter in the Black Sea basin;
- iii) Raise awareness on the key environmental issues and increase public involvement in the protection of the Black Sea.

### **PLANNED RESULTS AND OUTPUTS**

#### **Result 1: National and joint regional monitoring programmes implemented**

##### Key Outputs:

- proposals for the national and of the Black Sea regional monitoring networks;
- sharing information on the Black Sea environment (BS Water Quality Database);
- identification of the Black Sea Significant Water Management Issues (SWMIs);
- list of Black Sea Specific Pollutants (BSSPs);
- preparation of relevant parts of the MSFD Initial Assessment Reports.

#### **Result 2: Joint monitoring and reduction of river and marine litter facilitated**

##### Key Outputs:

- increased availability of information on the marine/riverine/beach litter and microplastics;
- targeted campaigns and small pilot actions aimed at marine litter reduction.

#### **Result 3: Environmental public awareness and education campaigns conducted**

##### Key Outputs:

- increased public awareness on environmental topics related to the Black Sea, its biodiversity and ecological values;
- strengthened involvement of the local communities, national CSOs/NGOs, academic and scientific institutions in environmental protection;
- further development of the Black Sea Savebook application.

#### **Result 4: Management and coordination of the project ensured**

##### Key Outputs:

- effective and efficient project implementation, management of Calls for Proposals in synergy the Black Sea Cross-Border Cooperation Programme;
- cooperation among the project partners and with relevant international institutions and initiatives.

The Project implementation period started on 5 March 2018 with an extended preparatory period and actual launch for project activities on 10 December 2018.

The beneficiary countries to be covered are the members of the Black Sea Synergy<sup>2</sup>, with a primary focus on the Black Sea coast countries Georgia, the Russian Federation<sup>3</sup> and Ukraine. The Project is funded by the European Union, co-financed and implemented by UNDP (providing 3% contribution to the overall budget).

### **Overview of the project progress and planned activities**

The activities planned under EMBLAS-Plus are in general on-track and implemented in the time frame discussed and agreed at the Steering Committee Meeting in February 2019. During the reporting period the highest priority was preparation and implementation of the Joint Black Sea Surveys, including visibility actions as well as initiation of the small pilot activities.

The following results and planned activities need to be highlighted per each Result:

#### **Result 1: National and joint regional monitoring programmes implemented**

##### National Monitoring Surveys:

- Ukraine: 26 May – 1 June 2019, lead of the field work – Ukrainian Scientific Centre of Ecology of the Sea (UkrSCES). The survey included the linear transect vessel survey of cetaceans and photo-ID activities <http://emblasproject.org/archives/3047>;
- Russian Federation: 5- 19 August, lead of the field work State Oceanographic Institution (SOI) <http://emblasproject.org/archives/3501>;
- Russian Federation: long-term observation programme: April – November 2019, lead of the field work Shirshov’s Institute of Oceanology (SIO-RAS).

##### Regional Joint Open Sea Survey:

- Ukraine/Georgia: 28 July – 8 August 2019 (Constanta – Odessa – Batumi – Constanta), organized directly by UNDP (Research Vessel Mare Nigrum of Romanian GeoEcoMar), involved national institutions: UkrSCES, IMB, NEA, TSU. The collected samples of water, sediments and biota, to be analysed in national laboratories and external laboratories - University of Athens, EC Joint Research Centre; German Federal Environmental Agency, Norwegian Institute for Water Research (NIVA);
- Russian Federation: 21 August – 2 September 2019, lead of the field work Shirshov’s Institute of Oceanology (SIO-RAS);
- Cooperation with ACCOBAMS project CeNoBS <http://www.accobams.org/main-activities/cenobs-project/>): Aerial monitoring Field survey “Flights with Dolphins”, Russian Federation, 18 – 26 September 2019, leading institutions Clean Seas Foundation, FSBI “State Oceanographic Institute” (SOI).

##### **PLANNED ACTIVITIES IN THE FOLLOW-UP PERIOD**

- National survey Georgia: lead of the field work – Georgian National Environmental Agency (NEA), jointly with EU EUWI+ Project;
- Further upgrade of BS WQE, review and upload completed Data Collection Templates from surveys 2019 and historical data;
- Analyses of collected samples, completion of the Data collection Templates

##### Black Sea water quality database

- Work on further improvement of functionalities, new modules for Fish, Marine Mammals and Marine Litter, collection of historical data initiated (to facilitate setting the threshold values for assessment schemes).

<sup>2</sup> Countries participating in the Black Sea Synergy: Armenia, Azerbaijan, Bulgaria, Georgia, Greece, the Republic of Moldova, Turkey, Ukraine, Romania and the Russian Federation

<sup>3</sup> As recognised by international law.



Capacity building (joint workshops with ANEMONE project), covering all Black Sea Countries:

- Workshop on tools and indicators for integrated assessment of the Black Sea environmental status (Istanbul 18-19 June 2019);
- Marine Litter and Micro-litter workshop (Constanta 26-27 July 2019);
- Training on Passive Sampling (Gelendzhik 17-19 November 2019).

**Result 2: Joint monitoring and reduction of river and marine litter facilitated**

Increased availability of information on marine/riverine/ beach litter

Litter monitoring is being part of the EMBLAS monitoring programme - the Joint Black Sea Surveys.

- Riverine floating litter is being collected at the rivers of Chorokhi, Natanebi, Rioni, Supsa (GE); Danube, Dniester (UA); Ashamba, Aderba - tributaries of Don (RF);
- Beach litter monitoring was done using the EEA Marine LitterWatch mobile app, at the beaches of Ureki, Kobulet, Sarpi, Tskaltsminda, Maltakva (GE); Sochi (RF); Chornomorka and beach in Kurortne village (UA);
- Marine floating litter was monitored using JRC Mobile application during the Open Sea part of the Surveys, as well as National surveys;
- Marine floating litter monitoring in the Georgian section of the Black Sea 30 August – 10 September, lead of the field work – Tbilisi State University  
<http://emblasproject.org/archives/3477>;
- Microplastics - Samples of water and sediments were collected to be analysed for the content of microplastics, data will be available early 2020;
- Infographics on the Marine Litter: “What is floating in the Black Sea” in four languages  
<http://emblasproject.org/archives/2906>.

Marine litter and awareness raising campaigns

- Marine litter prevention campaign “Sort Plastic – Save the Sea” in Ukraine completed (April-May 2019) <http://emblasproject.org/archives/2918>;
- Campaign: 2019 #EUBeachCleanup! - global initiative, in Ukraine under motto “I cleaned – Your Turn 2: Changing the Future Together”, organized on 16-30 September 2019.  
<http://emblasproject.org/archives/3463>;
- Small value grants awarded to national NGOs (3 projects - GE, 3 projects – UA), some of them specifically addressing the marine litter issues: in Georgia: “Tackling marine litter debris”, implemented by NGO WISTA; in Ukraine: “The Black sea coast line of Kherson region without litter”, implemented by NGO Regional Council of Entrepreneurs Kherson. In Russian Federation the project “Black Sea Awareness Campaigns” is implemented by NGO Znau Lublu.

**PLANNED ACTIVITIES IN THE FOLLOW-UP PERIOD**

- Marine litter prevention campaign “Sort Plastic – Save the Sea” in Georgia
- Continuation of marine/beach/riverine litter monitoring
- Implementation of local actions / small-scale projects in Georgia and Ukraine

**Result 3: Environmental public awareness and education campaigns conducted**Awareness raising on the Black Sea issues and public involvement

- The Black Sea infographics on Hypoxia, Biodiversity, Chemical Pollution, Marine Mammals – Dolphins, Marine Litter prepared in cooperation with Cousteau Society  
<http://emblasproject.org/visibility>
- Promotion of the results of the cetaceans surveys in the Black Sea;
- Two Press-conferences organized with the Surveys in July 2019 (Ukraine) and August 2019 (Georgia)The Black Sea Day / Clean Beach events organized in September-November 2019 in Georgia, Russian Federation and Ukraine.

**PLANNED ACTIVITIES IN THE FOLLOW-UP PERIOD**

- Implementation of other small-scale projects in Georgia and Ukraine
- Public report on the findings of the monitoring surveys.

Dissemination of information about the project

The project has been presented in a number of national and international events. Those included meetings of the Black Sea Commission (Oct 2018, 2019) and its Advisory Groups (Apr 2018), events with participation of Ukrainian media organized by EU Delegation (Apr 2019) and UNDP (Oct 2019), as well as events organized by ACCOBAMS CeNoBS project (Oct 2019), ANEMONE project (June 2019), EUWI+ project (Nov 2019) and ICBSS (Nov 2019).

**Result 4: Management and coordination of the project ensured**

The Project Steering Committee Meeting and Inception Workshop were organized on 21-22 Feb 2019 in Istanbul, with the objective to confirm the project implementation plan and discuss technical details of project activities. The event has been chaired by IRH Manager and EC DG NEAR Team Leader for Connectivity, attended by the SC members from the primary beneficiary countries, representatives of the national organizations and relevant projects.

The following experts were recruited: Project Management Advisor (team leader), PR Expert, Project assistant, Communication Assistant, Chemistry expert, IT experts, Senior biology expert, Junior biology expert, e-DNA Expert.

Contracts for services were concluded for Provision of Research Vessel for the Joint Black Sea Surveys 2019 and for Analysis of WFD Priority Substances and screening of Black Sea Specific Pollutants in water, biota and sediment samples obtained during the Joint Black Sea Surveys 2019.

Three calls for proposals were launched to identify partners for the implementation of monitoring activities, collect historical monitoring data and carry out local actions aimed at awareness raising and marine litter pollution reduction. As a result 5 Letters of Agreement were signed with national scientific institutions and 6 Low Value Grants Contracts with the national NGOs.

Where possible, the project was closely coordinating its activities with other EU funded projects – ANEMONE (<http://anemoneproject.eu>) and EUWI+ (<https://www.euwipluseast.eu/en/>).

Information on the project activities was regularly disseminated through the project website [www.emblasproject.org](http://www.emblasproject.org) and Facebook page “Fans of the Black Sea” <https://www.facebook.com/groups/1660089820968698>.

**PLANNED ACTIVITIES IN THE FOLLOW-UP PERIOD**

- Project Steering Committee (virtual Feb2020) and Technical Scientific Coordination workshop ;
- Oversight and coordination small scale projects;
- Final reporting and results dissemination (website and facebook posts and updates, publications);
- Continue cooperation with other projects, initiatives and institutions.

**Emerging challenges and measures taken**

During the reporting period the project needed to address three major issues: administrative, political and financial. The administrative challenge was related to the contractual negotiation of the Delegation Agreement between EC and UNDP, that was taking longer than expected. EC DG NEAR and UNDP agreed on the retroactive project start (5 March 2018) and therefore it was possible to keep links between EMBLAS-II and current project phase through continuation of relevant activities (e.g. work on the databases) and preparatory works necessary for the full scale project implementation.

Political challenge is related to the results of elections in Ukraine and change of the overall political situation in the country. A new ministry for the Ministry of Energy and Environmental Protection has been created on 29 August 2019, which have merged MENR and Ministry of Energy and Fuel. The new minister has been appointed in summer 2019 and at the moment not all posts are nominated. It is expected, that there might be some changes in the prioritization of activities linked with the EU Association Agreement. In coordination with EC Delegation and UNDP Country Office of Ukraine, it will be necessary to establish proper contacts and provide relevant information to the newly nominated staff at the ministry that will be in charge to represent the ministry at the Steering Committee.

The financial challenge relates to the potential negative impact of EUR/USD exchange rate on the project budget. It remains a serious issue and it is monitored by the Project Management Team. The planning of the remaining activities until the end of the project implementation period (5 September 2020) will need to take into account potential loss of operational budget by \$25,000 (considering the UN Operational Rate of Exchange (UNORE)<sup>4</sup> as of December 2019).

So far, there was no need to introduce any major changes in the project implementation and the project is progressing as planned.

**Cooperation with other partners and projects**

The EMBLAS-Plus is building-up on contacts and cooperation with international institutions and initiatives, established in the previous project phase. Close collaboration continues with the EC Joint Research Centre (on marine litter and chemical contaminants), NIVA (passive sampling and microplastics in sea water), German Federal Environmental Agency (microplastics in sediments) EUWI+ (surveys and awareness raising campaigns), ANEMONE project (data sharing, development of harmonised assessment schemes, capacity building). Cooperation with ACCOBAMS project CeNOBS has been agreed on cetaceans monitoring in the Black Sea and EMBLAS-Plus facilitated the aerial survey in the Russian Federation. The project has also created links with the ICPDR, since the scientific programme of the Joint Black Sea Survey 2019 and Joint Danube Survey 4 (organized by the ICPDR) are harmonised and using the same methodologies.

The project is also partnering with other EU funded projects and initiatives, such as EMODnet (<http://www.emodnet.eu>), SeaDataNet (<https://www.seadatanet.org>), WISE-Marine (<https://water.europa.eu/marine>), IPCHeM (<https://ipchem.jrc.ec.europa.eu>) and new data from the Joint Black Sea Surveys will be shared.

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<sup>4</sup> <https://treasury.un.org/operationalrates/OperationalRates.php>

## **Project visibility**

During the project implementation a number of communication tools were used to strengthen the project visibility and to reach relevant target audiences.

### Website and social networks

The project website [www.emblasproject.org](http://www.emblasproject.org) is regularly updated with information on the project activities and events. The project Facebook community members "Fans of the Black Sea" are also regularly publishing posts related to the project activities, as well as various issues related to the Black Sea environment.

#### **THE FACEBOOK COMMUNITY "FANS OF THE BLACK SEA"**

- Increased memberships by more than 500 persons since 2016

#### **THE PROJECT WEBSITE [WWW.EMBLASPROJECT.ORG](http://WWW.EMBLASPROJECT.ORG)**

- Increased nr. of visitors by more than 6,500 persons since November 2018

### Public events and campaigns

The project organized directly one Marine litter prevention campaign "Sort Plastic – Save the Sea" (April-May 2019) in Ukraine (to be replicated in Georgia) and co-organized the campaign "2019 #EUBeachCleanup! (September 2019) – global initiative, in Ukraine under motto "I cleaned – Your Turn 2: Changing the Future Together", jointly with EUWI+ Project.

At the occasion of the Joint Black Sea Survey two press conferences were organized in Odessa (29 July 2019) and Batumi (5 August 2019), where the EMBLAS-Plus project was presented and which gained a lot of media attention (120 media links in Ukraine and 16 media links in Georgia). Both events were consulted with the communication teams of EU Delegations and UNDP Country offices in Ukraine and Georgia.

The project has been promoted at the press-conference at the Danube Day celebration in Ukraine in the Danube Delta on 29 June 2019, as well as at the Ukrainian Press Tour event on 24 April 2019, organized by the EU Delegation Ukraine and IV. Module of School of Environmental Journalism organized by UNDP Ukraine on 8-9 October 2019, both in Odessa.

The project has been also represented at the International High-level Conference "Inter-basin Cooperation on Marine Litter: a focus on the Danube River and the Black Sea" (4 April 2019, Sofia) and "Regional Stakeholders Conference on 'Black Sea Synergy: the way forward' (Athens, Greece), 7 November 2019.

### Publications and audio-visual productions

The project prepared 6 Infographics – Posters (English, Georgian, Russian, Ukrainian version) <http://emblasproject.org/visibility>, which are used to communicate the project findings and the Black Sea environment issues during the various public events. Two promotional cartoon movies were prepared for the above-mentioned campaigns to illustrate better the marine litter issue, as well as objectives and expected results from the campaign's activities (<https://youtu.be/1WOrPvCeSLE>; <https://youtu.be/kzTY5SBR28s>).

### Promotional items

Promotional items were prepared for the Joint Black Sea Surveys (T-shirts and caps for the scientific teams of the surveys) as well for campaigns (eco-bags, key chains, the Black Sea puzzles, diploma for the participants of surveys as a present for their active involvement) and widely distributed.

## 1. Introduction

### 1.1 Report objective and structure

The present document is the 1<sup>st</sup> Progress Report of the EU/UNDP project: Improving Environmental Monitoring in the Black Sea– Selected Measures (EMBLAS-Plus) – Delegation Agreement ENI/2017/389-859, directly implemented by UNDP Istanbul Regional Hub (Regional Bureau for Europe and the CIS). The current document is an annual report, which provides an overview on all project activities implemented during the period 5 March 2018 – November 2019.

This report is accompanied with the request for the next financial contribution, as the project expenditures reached the threshold value, when the next contribution is due, as per Article 19.1 of the General Conditions.

Short background information is provided in this Chapter 1. Introduction, which includes an overview on project activities and key results achieved until now. Chapter 2. Progress on activities and results provides details on the achievements of the project during the reporting period within each of the Project Results, including status of progress indicators, and gives also an overview of the activities to be carried out until the end of the project. Chapter 3. Emerging challenges and measures summarizes the issues raised during the project implementation and how they need to be/ were addressed. The Workplan for 2019 - 2020 and tentative schedule of the project events are given in the table form in the Chapter 4. Time Schedule. Chapter 5. Cooperation with other partners and projects briefly informs how the project interacts with other projects and institutions. Visibility activities undertaken as well as further planning are described in the Chapter 6. Overview of results/targets/achievements provides a brief summary on the indicators as per the project log-frame Chapter 7. The Financial Report - Chapter 8., provides an overview of project expenditures incurred since start of the project. The financial reporting is in line with the Annex III-Budget of the Action and the General Conditions of the Delegation Agreement.

### 1.2 Brief project overview

The overall objective of the EMBLAS-Plus project is to help improve protection of the Black Sea environment. This objective will be pursued through further technical assistance focused on marine data collection and local small-scale actions targeted at public awareness raising and education, and clean-up activities.

The specific objectives are as follows:

- i) Improve availability and sharing of marine environmental data from the national and joint regional monitoring programmes aligned with the MSFD and WFD principles and the Black Sea Integrated Monitoring and Assessment Programme (BSIMAP);
- ii) Support joint actions to reduce river and marine litter in the Black Sea basin;
- iii) Raise awareness on the key environmental issues and increase public involvement in the protection of the Black Sea.

In order to achieve the specific project objectives, the following results and outputs are foreseen:

#### **Result 1: National and joint regional monitoring programmes implemented**

Key Outputs: further proposals for the national monitoring programs and proposal of the Black Sea regional monitoring network; enhancing shared and publicly accessible information on the Black Sea environment (through use of web-based Black Sea Water Quality Database (BS WQD)); identification of the Black Sea Significant Water Management Issues (SWMIs); preparation of the list of Black Sea Specific Pollutants (BSSPs); preparation of relevant parts of the MSFD Initial Assessment Reports.

#### **Result 2: Joint monitoring and reduction of river and marine litter facilitated**

Key Outputs: increased availability of information on the marine/riverine/beach litter and microplastics; targeted campaigns and small pilot actions aimed at marine litter reduction.

**Result 3: Environmental public awareness and education campaigns conducted**

Key Outputs: increased public awareness on environmental topics related to the Black Sea, its biodiversity and ecological values, strengthened involvement of the local communities, national civil society organizations, NGOs, academic and scientific institutions in environmental protection and further development of the Black Sea Savebook application.

**Result 4: Management and coordination of the project ensured**

Key Outputs: effective and efficient project implementation, including management of Calls for Proposals in full synergy with activities of the Cross-Border Cooperation Programme (CBC) in the Black Sea, as well as strong cooperation among the project partners and with relevant international institutions and initiatives.

The project has been prepared by UNDP Istanbul Regional hub – Regional Centre for Europe and CIS in 2018 in the context of the ENI Regional East Strategy Paper (2014-2020)<sup>5</sup>; Regional East Multiannual Indicative Programme (2017-2020)<sup>6</sup> and the Joint Operational Programme for the Black Sea Basin 2014-2020<sup>7</sup>. The project is part of the ENI East Regional Action Programme 2017, Part 2: Support to the Implementation of the Eastern Partnership Multilateral Dimension and the Implementation of the Northern Dimension and the Black Sea Synergy.

The beneficiary countries to be covered are the members of the Black Sea Synergy<sup>8</sup>, with a primary focus on the Black Sea coast countries Georgia, the Russian Federation<sup>9</sup> and Ukraine. Turkey, Bulgaria and Romania will be associated to the extent possible (e.g. observers at Steering Committee meetings, participating in coordination meetings with the European Commission, exchange of information, participating in the technical working groups, trainings with their own funds) through other ongoing projects in which they participate, as well as through the activities of the Black Sea Commission, when deemed appropriate. The Project is co-financed by EC and UNDP.

The formal start of the project was on 5 March 2018, however the Agreement between EC and UNDP has been signed only on 5 December 2018, due to contractual negotiations between EC and UN. This interim period (between the project start and Agreement signature) has ensured the linkages and synergies with the previous project Phase EMBLAS-II, through continuation of work on the Black Sea Water Quality Database, further consolidation of the background scientific results for the new project and sharing data. The Description of the Action has been elaborated in necessary details – considering the national priorities of Georgia and Ukraine related to the EU Association process, as well as the results of the 1st call for project proposals of the ENI CBC “Black Sea Basin Joint Operational Programme 2014-2020”.

The project continues supporting the countries in their efforts to harmonize their policies and legislation with the EU Water related legislation and fulfilling their obligations under the Bucharest Convention. Besides that, the project brings new innovative approaches to the environmental monitoring and build capacities of the national institutions and experts in using novel methodologies and the state-of the art environmental monitoring practices. Thus, the involved national institutions and experts are becoming qualified and reliable partners in environmental research the organizations at the European level.

The direct involvement of the national scientific and educational institutions in the project implementation, as well as involvement of the local authorities or civil society organizations are the prerequisite of the strong ownership and sustainability of the project results, which are responding to the national needs and will be further used and maintained. Creating partnerships of scientific

<sup>5</sup> [http://eeas.europa.eu/archives/docs/enp/pdf/financing-the-enp/regional\\_east\\_strategy\\_paper\\_2014\\_2020\\_and\\_multiannual\\_indicative\\_programme\\_2014\\_2017\\_en\\_.pdf](http://eeas.europa.eu/archives/docs/enp/pdf/financing-the-enp/regional_east_strategy_paper_2014_2020_and_multiannual_indicative_programme_2014_2017_en_.pdf)

<sup>6</sup> [http://eeas.europa.eu/archives/docs/enp/pdf/financing-the-enp/regional\\_east\\_summary\\_of\\_the\\_strategy\\_paper\\_2014\\_2020\\_and\\_multiannual\\_indicative\\_programme\\_2014\\_2017\\_en.pdf](http://eeas.europa.eu/archives/docs/enp/pdf/financing-the-enp/regional_east_summary_of_the_strategy_paper_2014_2020_and_multiannual_indicative_programme_2014_2017_en.pdf)

<sup>7</sup> <http://blacksea-cbc.net/wp-content/uploads/2015/12/ENI-CBC-Black-Sea-Basin-JOP-final.docx>

<sup>8</sup> Countries participating in the Black Sea Synergy: Armenia, Azerbaijan, Belarus, Bulgaria, Georgia, Greece, the Republic of Moldova, Turkey, Ukraine, Romania and the Russian Federation

<sup>9</sup> As recognised by international law.

institutions with educational, civil society organizations, local authorities and private sector ensures sustainability of the public awareness on the Black Sea environmental issues. Supporting Georgia and Ukraine in the EU accession process of Georgia and Ukraine through providing advice and services for preparation of specific documents (within the scope of the project) will ensure sustainability of the project results at the policy level.

## 2. Progress on activities and results

### 2.1 Result 1: National and joint regional monitoring programmes implemented

The aim is to improve availability and sharing of cross-border compatible MSFD-, WFD- and BSIMAP-aligned environmental monitoring data and related information obtained in the Black Sea region. Implementation of harmonised monitoring programmes, compliant with the MSFD and WFD, is a prerequisite for collection of high quality environmental data, which can be further shared at the regional level (the Black Sea countries), as well as at the European level (e.g. DG Environment, the European Environment Agency).

The key Outputs include further proposals for the national monitoring programs and proposal of the Black Sea regional monitoring network; enhancing shared and publicly accessible information on the Black Sea environment (through use of web-based Black Sea Water Quality Database (BS WQD)); identification of the Black Sea Significant Water Management Issues (SWMIs); preparation of the list of Black Sea Specific Pollutants (BSSPs); preparation of relevant parts of the MSFD Initial Assessment Reports.

#### **Progress of work and delivered results**

##### **Activity 1.1 Implementation of the national monitoring programmes in accordance with reporting obligations under the MSFD, WFD and BSIMAP**

The activity included preparation of monitoring programmes and implementation of the National Monitoring Surveys (NMS), following the pilot surveys organized in the EMBLAS-II. The currently implemented NMS were including systematic monitoring of general physico-chemical parameters, Nutrients, Meteorology, Contaminants in water, sediments, biota, biological parameters (Macrophytobenthos, Macrozoobenthos, Mesozooplankton, Meiobenthos, Phytoplankton, Ichtyoplankton), marine mammals, as well as marine litter and microplastics.

The commonly agreed SOPs and QA/QC procedures (prepared during EMBLAS-II) for sampling and analyses were applied, as well as the new SOPs prepared for the large volume sampling with use Mariani Box, Horison Sampler and JRC prototype (linked with Activity 1.4). For marine litter monitoring the "Guidance on Monitoring of Marine Litter in European Seas", prepared by EC JRC, were used as SOPs (<https://mcc.jrc.ec.europa.eu/documents/201702074014.pdf>). It was agreed by all project partners that the data obtained within the JBSS 2019 (NMSs and JOSSs) will be provided in the harmonised format using Data Collection Templates developed in EMBLAS-II.

**In Georgia, the NMS** programme has been prepared by National Environmental Agency (NEA). The NMS will follow monitoring programme initiated in EMBLAS-II. Sampling was organised in close cooperation with EUWI+ project. A preliminary arrangement suggested that EUWI+ would provide space for EMBLAS-Plus experts on board of the sampling vessel and EMBLAS-Plus would cover *i.a.* analyses of WFD priority substances and Black Sea Specific Pollutants.

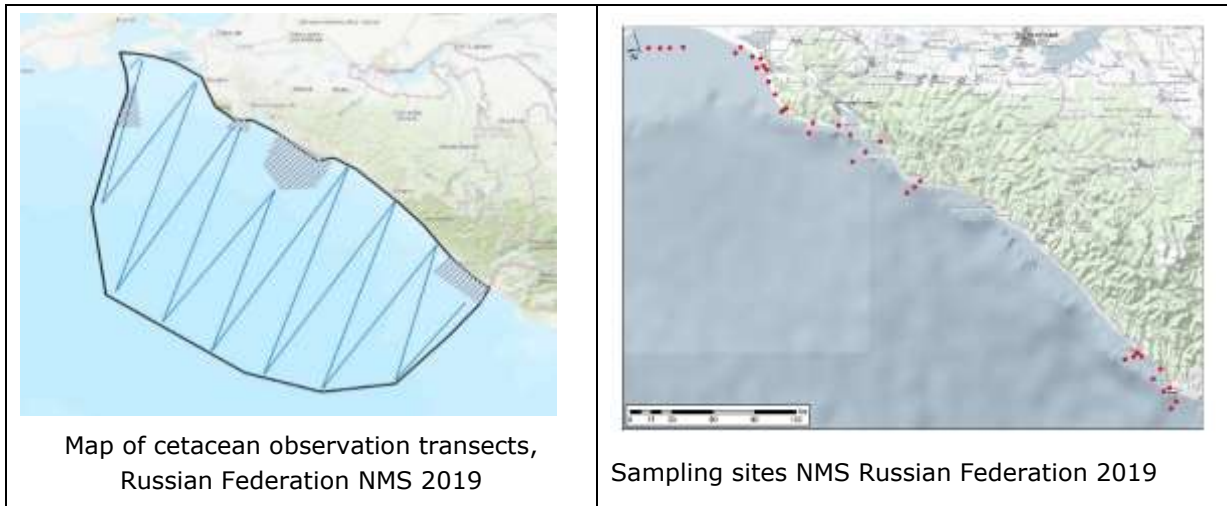
**In the Russian Federation, the NMS** has been led by State Oceanographic Institute (SOI).

The sampling has been carried out survey at 37 locations in Caucasian coastal waters of the Black Sea (5- 19 August 2019), covering the area of Kerch Strait and it's southern shallow-waters vicinity to Pshada river estuary and Adler-Sochi region between the estuaries of Sochi and Psou rivers. <http://emblasproject.org/archives/3501>. The survey included aerial observation of cetaceans "Flights with Dolphins" (18 – 26 September 2019), leading institutions SOI and Clean Seas Foundation, organized in cooperation with the ACCOBAMS project CeNoBS<sup>10</sup>.

The sampling, measurements and observations included physical-chemical, hydrometeorological parameters, chemical pollutants in sediments and biota, biologic parameters (chlorophyll a, phytoplankton, bacterioplankton, zooplankton, macro zoobenthos, meiobenthos), marine litter and marine mammals. The collected samples were distributed for analyses to Typhoon laboratory Obninsk, SOI laboratory Moscow and Laboratory in Novorossiysk.

<sup>10</sup> <http://www.accobams.org/main-activites/cenobs-project>





**The NMS – 7 months observation**, led by Shirshov Institute of Oceanology, Russian Academy of Sciences (SIO-RAS) has been carried out in three locations.

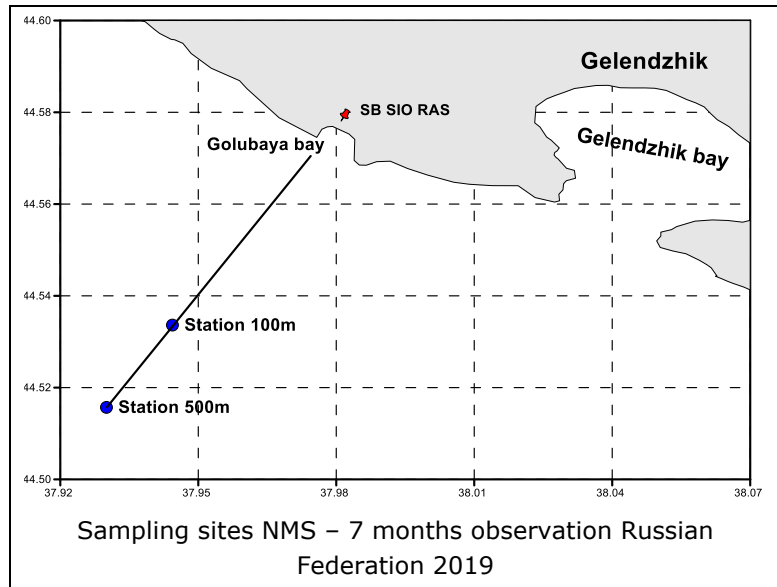
The Gelendzhik Bay is a relatively small in area, shallow and significantly isolated from the open sea, which is exposed to a particularly strong anthropogenic impact.

The Blue Bay is located north and with free water exchange with the sea, with less anthropogenic impact. The hydrochemical and biological characteristics of the waters of these bays provides data for identification and assessment of the anthropogenic impact on the semi-closed water areas with difficult water exchange.

Shelf waters, observations at two

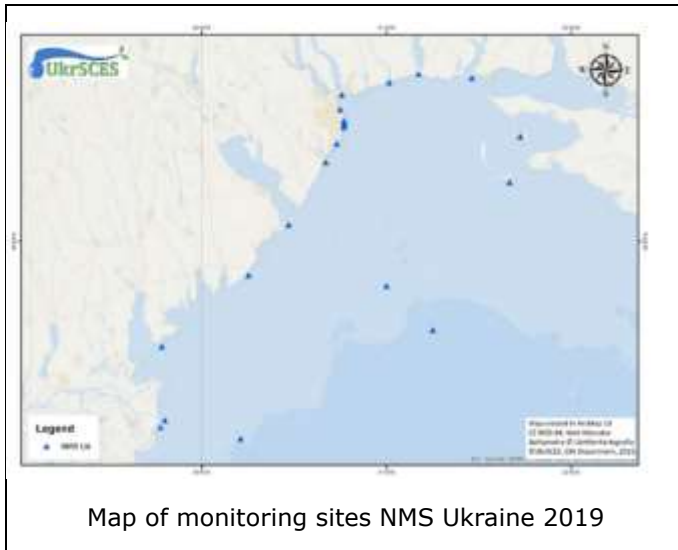
locations: 100 m station is the typical shelf area of the North Caucasus where the influence of the shore on ecosystem is definitely seen and the 500 m station, which is boundary between the shelf and open waters and can be used as a proxy of the clean deep-basin waters. This location can be used as a reference conditions for pollutants and other anthropogenic impact on shelf ecosystem.

The monitoring includes hydrochemical and biological (phytoplankton, mesozooplankton, ichthyoplankton, macroplankton (gelatinous plankton) parameters, assessment of biodiversity, marine litter pollution, microplastics in zooplankton.



**The NMS in Ukraine** was led by Ukrainian Scientific Centre for Ecology of the Sea (UkrSCES).

The cruise included a linear transect vessel survey of cetaceans and photo-ID (identification) activities (26 May – 1 June 2019), (<http://emblasproject.org/archives/3047>) coordinated with the ACCOBAMS project CeNoBS<sup>11</sup> and observations at 20 sampling sites in the North-western part of the Black Sea in Ukrainian marine waters (August-October 2019), including Zernov's Phyllophora Field - a unique habitat located in the north-western shelf of the Black Sea.



Map of monitoring sites NMS Ukraine 2019

The sampling, measurements and observations included physico-chemical and hydrobiological parameters, floating marine litter, hydrophysical observations, chemical pollutants, geocological, hydrometeorological and hypoxia observations.



The Black Sea common dolphins



Map of cetacean observation transects, Ukraine NMS 2019

### Activity 1.2 Implementation of regional monitoring programmes compliant with BSIMAP - Joint Black Sea Survey

The implementation of a regional monitoring programme – Joint Black Sea Survey (JBSS 2019) was based on the results from the regional monitoring programme tested in EMBLAS-II, guided in their scope and working methods by the EU legislation <sup>12</sup> (MSFD, WFD) and BSIMAP. As in the previous cruises in 2016 and 2017, due to administrative reasons, the survey was organized in two parts – in Russian Federation and jointly in Georgia and Ukraine.

Similarly, to the NMSs, data on new parameters were collected, including full set of chemical and biological parameters, investigations on the adverse effects of presence of invasive species, marine mammals and marine litter.

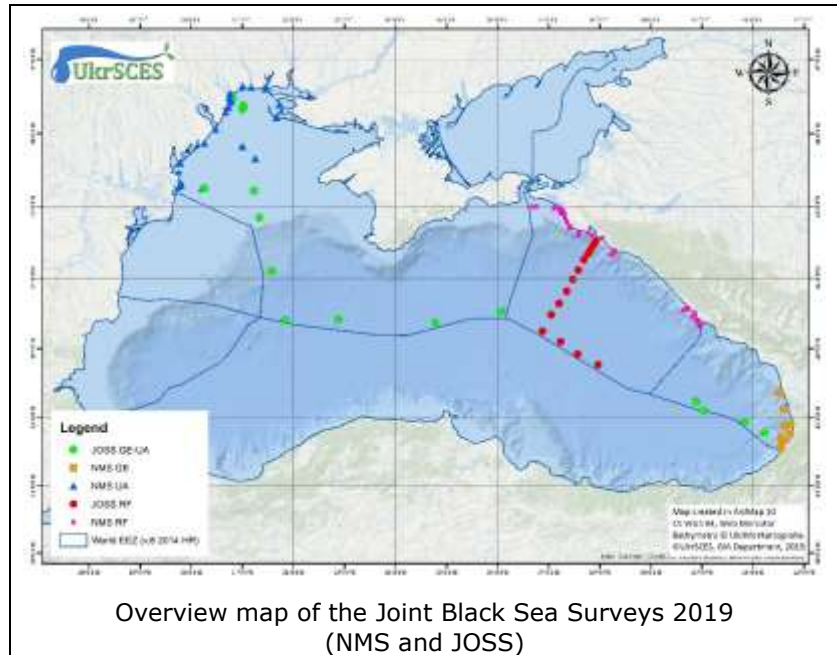


Research Vessel Mare Nigrum

<sup>11</sup> <http://www.accobams.org/main-activities/cenobs-project/>

<sup>12</sup> For the surveys in Russian Federation, the EU legislation (MSFD and WFD) is proposed to be taken into account, however the provisions of the national legislation will prevail.

**The JOSS GE-UA** (28 July – 8 August 2019) has been organized by UNDP (Research Vessel Mare Nigrum of Romanian GeoEcoMar). The programme included collection of samples for analyses by external laboratories including microplastics, large volume water and biota samples for analysis of specific pollutants, ecotoxicological screening and eDNA analyses. The scientific crew doing the field work was composed of the national experts from UkrSCES, IMB, NEA-Black Sea Monitoring Center, TSU and supported by the project short-term international experts for chemistry, biology and e-DNA.



Next to on-board observations and analyses, the collected samples are analyzed by external laboratory at University of Athens. German Federal Environmental Agency is providing in-kind analysis of microplastics in sediments using state-of-the-art TD-GC-MS. Norwegian Institute for Water (NIVA), contributes with trainings and technical assistance at: (i) analysis of microplastics in sea water using extraction of large sample volume on a series of filters submitted for analysis by FTIR; and (ii) passive sampling.



Part of the samples are being analysed in UKRSCES, IMB, NEA, TSU. The EC Joint Research Center provided support at monitoring of marine litter, WFD priority substances and additional target pollutants in water samples.

**The JOSS RF** (21 August – 2 September 2019) has been organized directly by the Russian project partner Shirshov's Institute of Oceanology (SIO-RAS), which was responsible for all logistic arrangements including rental of adequate research vessel, scientific team composition, as well as analyses and completion of the Data Collection Templates. The survey covered the north-eastern part of the Black Sea. The survey programme addressed several MSFD Descriptors, with focus on Biodiversity, Non-indigenous species, Eutrophication, Contaminants and Marine Litter.

### Activity 1.3 Facilitate sharing of environmental monitoring data at the regional and European level

The Black Sea Water Quality Database (BS WQD) is an important part of BSIMAP and its further development, enlargement and public availability will be the basis for sharing information and data on the Black Sea environment. In EMBLAS-II the potential for further development of the BS WQD has been identified, mainly in relation to development of new modules covering additional MSFD descriptors (e.g. underwater noise), parameters (e.g. ichthyology module), as well as additional functionalities allowing data interpretation. New DCTs have been developed for fish and marine

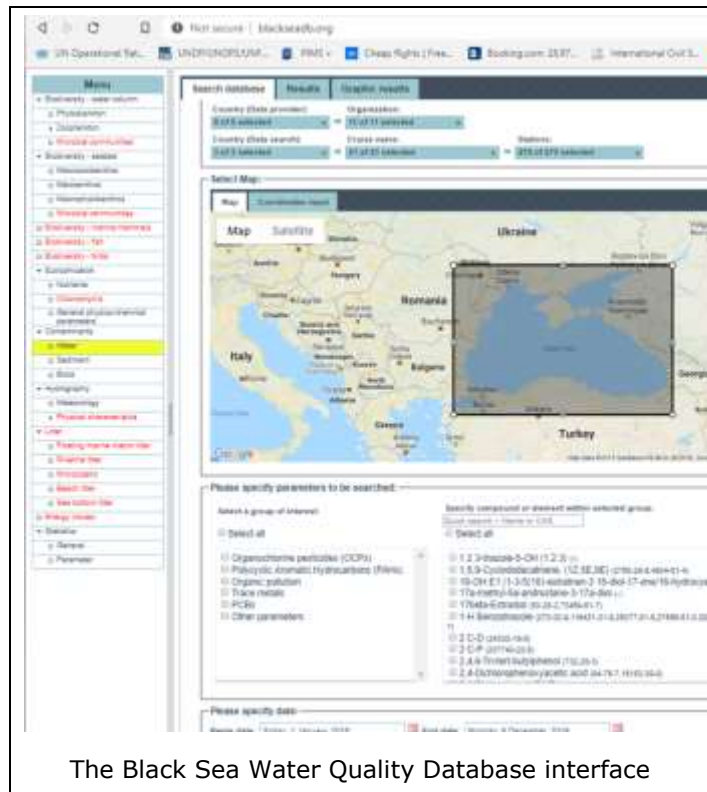
mammals, the preparation of DCTs for marine litter is under preparation, as well as corresponding database modules.

The BS WQD is hosted by UkrSCES, which is Black Sea Commission Activity Center for Pollution Monitoring and thus have the mandate to store and process data from all Black Sea countries.

It was agreed by all project partners that the data obtained within the JBSS 2019 (NMSs and JOSSs) will be provided in the harmonised format using Data Collection Templates developed in EMBLAS-II. It is planned to further populate the BS WQD with so called 'historical' data, either from previous EU-funded projects like MISIS, PERSEUS (to be obtained via BSC PS), or other data from national surveys carried out by BS countries in the past. An additional 'call for proposals' will be launched to cooperate with institutions having relevant data on the BS environment.

EMBLAS-Plus is closely cooperating with the ANEMONE project, which organized monitoring surveys in other Black Sea countries (Bulgaria, Romania, Turkey and Ukraine) and it has been agreed that

results of the surveys will be provided in the format of DCTs developed by EMBLAS and shared for the upload to the BS WQD. The provision of the data is currently in the process.



The Black Sea Water Quality Database interface

#### Activity 1.4 Capacity building on novel monitoring methods, quality assurance/quality control and use of the Black Sea Water Quality Database

Building up and further strengthening capacities of the project partners in the field of environmental monitoring is important part of the project activities. It includes organization of trainings or facilitation of participation of national experts in relevant workshops, with focus on the novel methodologies and classification schemes. So far, the following trainings were organized:

- Workshop on tools and indicators for integrate assessment of the Black Sea

environmental status (Istanbul 18-19 June 2019) – organized by ANEMONE project, with participation of experts from EMBLAS project countries (19 experts: 7 M / 12 W);



Marine Litter and Micro-litter workshop, organized jointly with ANEMONE

- Marine Litter & Micro-litter workshop (Constanta 26-27 July 2019) – organized by EMBLAS-Plus with participation of experts from ANEMONE (21 experts: 4 M / 17 W);
- Training on passive sampling (Gelendzhik, 17-19 November 2019 – organized with support from the Norwegian Institute for Water Research – NIVA (6 experts; 2 M / 4 W).

As a part of the capacity building activities, the Standard Operational Procedures (SOPs), developed in the frame of EMBLAS-II were updated, added SOPs for the Large Volume Sampling with use of Mariani Box, Horison Sampler and JRC prototype (additional on e-DNA are being prepared).

### **Activity 1.5 Support countries to comply with obligations under the Bucharest Convention and EU Association Agreements**

The activity includes:

- Support at drafting parts of the Initial Assessment in GE and UA according to the MSFD methodology, based on the data collected within EMBLAS-II and EMBLAS-Plus – in coordination with the partner governments and relevant donor projects;
- Initiating process of the Black Sea region-wide compilation of the latest information allowing for assessment of the environmental status (MSFD; territorial waters) and ecological and chemical status (WFD; coastal water bodies) and related identification of impacts (Significant Water Management Issues; SWMIs) and pressures of both national and Black Sea-wide importance.

As part of the work under this activity the Proposal on delineation of Ukrainian national Black and Azov Seas marine subdivision has been prepared, to support the state monitoring in line with the EU WFD and MSFD requirement.

### **Planned activities for follow-up period**

The planned activities include follow-up work on analysis of samples collected during the Joint Black Sea Surveys, preparation and verification of the DCTs and data upload to the Black Sea Water Quality Database and preparation of the Scientific reports. It is planned to collect also historical data with support of the national project partners, which should be converted into relevant DCT format.

Based on the available data and results of the current surveys 2019, as well as surveys organized by EMBLAS-II in 2016/2017 and historical data, the following will be prepared:

- List of the Black Sea Specific Pollutants (BSSPs) and identification of the Significant Water Management Issues;
- Proposal of the BS regional monitoring network and national monitoring networks;
- Fine-tuning and further development of the water quality / good environmental status (WQ/GES) classification schemes developed in EMBLAS-II for GE, RF and UA, including the establishment of threshold values, biological indicators and environmental targets, considering also historical data. The work will be led by the Institute of Marine Biology.

The upgrade of the BS Water Quality database includes preparation of the new modules on zooplankton, ichthyoplankton, benthic habitats, macrophytobenthos, chemicals identified within the wide-scope target and suspect screening screening and passive sampling data, marine litter and marine mammals monitoring data. The database will be populated with the new data from current surveys, as well as with historical data from the beneficiary countries, and possibly including data from PERSEUS and MISIS projects via BSC. It is planned to add functionalities to the BS WQD allowing interpretation of results, assessing trends and providing input to the BSIMAP.

It is planned to continue with sharing data with the other European marine data platforms incl. EMODNet (<http://www.emodnet.eu>), IPCHEM (<https://ipchem.jrc.ec.europa.eu>), SeaDataNet (<https://www.seadatanet.org>), WISE-Marine (<https://water.europa.eu/marine>), ICPDR's Water Quality Database, EEA (beach litter data), EC JRC (marine and riverine litter data) taking into consideration requirements of SEIS.

Further capacity building activities will focus on training of experts in use of novel methodologies, practical use of the Black Sea Water Quality Database and its functionalities, application of the

environmental and ecological status classification schemes, etc. New SOPs will be prepared for future monitoring surveys (on e-DNA, passive sampling, etc.)

Further work is planned on the improvement of the classification schemes for assessing ecological status of coastal zone waters and environmental status of territorial waters, as well as on the selection of biological indicators suitable to be included into national monitoring programmes and methods for their monitoring (based on the Guidelines on biological monitoring as developed by EMBLAS-II and approved by the BSC). It will also include continuation of work on the determination of boundaries of the national marine sub-regions, reference conditions and status assessment thresholds values for selected biological indicators for assessment of coastal, territorial and open sea waters covered by the project activities.

### Overview on overall deliverables, expected results and indicators of achievements

Result 1: National and joint regional monitoring programmes implemented				
Activities	Deliverables overall / Deliverables partial	Month	Responsible	Status
<b>Activity 1.1 Implementation of the national monitoring programmes in accordance with reporting obligations under the MSFD, WFD and BSIMAP</b>	<ul style="list-style-type: none"> <li>Manuals for National Pilot Monitoring Studies (NPMS) updated and NMS organized;</li> <li>Data Collection Templates (DCTs) with results of the surveys ready for upload to the BS WQD;</li> <li>Results from NMSs reported, included to shared databases (Technical &amp; Scientific Report*);</li> </ul>			
<ul style="list-style-type: none"> <li>Further testing and revision of draft proposed monitoring programmes in each country, based on the results from the NPMS carried out in EMBLAS-II and support at their implementation with an extended coverage, sampling and analytical programmes – organization of NMS</li> <li>Application of commonly agreed SOPs and QA/QC procedures for sampling and analysis of chemical and biological parameters, further development of SOPs for novel techniques (ML, LVS, passive sampling, e-DNA, microplastics, etc.)</li> <li>*Preparation of a list of the Black Sea Specific Pollutants (BSSPs; based on the data obtained from the surveys 2016/2017 and 2019)*.</li> </ul>	NMS programme	May 19	NEA (GE) UkrSCES (UA) SOI (RF)	Programmes prepared (3) for UA, RF, GE
	NMS organized in GE/RF/UA	Aug - Nov 19		NMS organized in RF and UA, NMS in GE scheduled for autumn 2019
	Technical Report, incl. overview of SOPs used	Nov 19		Technical reports NMS RF/UA prepared
	Scientific Report - draft	Feb 20		Draft to be discussed at the
	Scientific Report – final, including results interpretation – EMBLAS surveys 2016, 2017, 2019 / list of BSSPs*	July 20	All partners, STE	Technical coordination workshop March 2020
<b>Activity 1.2 Implementation of regional monitoring programmes compliant with BSIMAP - Joint Black Sea Survey</b>	<ul style="list-style-type: none"> <li>JBSS Manual updated to include novel methodologies and JBSS organized in line with the relevant requirements of EU legislation and BSIMAP;</li> <li>Historical data collected and made available for analysis;</li> <li>Results of JBSS analysed, reported, included to shared databases (Technical &amp; Scientific Report);</li> <li>Improved good environmental status (WQ/GES) classification schemes.</li> </ul>			
<ul style="list-style-type: none"> <li>Implementation of a regional monitoring programme – Joint Black Sea Survey (JBSS 2019), based on the results from the regional monitoring programme tested in EMBLAS-II with extended sampling and analytical programme – JOSS GE-UA and JOSS RF</li> </ul>	JOSS GE-UA programme – contribution from natl. partners UkrSCES, NEA JOSS RF programme - SIO-RAS	Mar/Apr 19	NEA (GE) UkrSCES (UA) SIO-RAS (RF)	Programmes prepared (2) for Joint survey GE/UA and for Survey RF.
	Survey organized	July-Aug19	NEA (GE) UkrSCES (UA) SIO-RAS (RF)	JOSS GE/UA and JOSS RF organized
	Technical Report and Draft Scientific Report	Nov19/Feb20	NEA (GE) UkrSCES (UA) SIO-RAS (RF)	Technical reports prepared (5) from JOSS and NMS

<b>Result 1: National and joint regional monitoring programmes implemented</b>				
<b>Activities</b>	<b>Deliverables overall / Deliverables partial</b>	<b>Month</b>	<b>Responsible</b>	<b>Status</b>
	Scientific Report – final, including results interpretation – EMBLAS surveys 2016, 2017, 2019	Jul 20	All partners, STE	Draft to be discussed at the Technical coordination workshop March 2020
<ul style="list-style-type: none"> <li>Considering the results of the JOSS 2016/2017 and 2019, preparation of a proposal of the BS regional monitoring network, BSIMAP compliant</li> </ul>	Proposal of the BSIMAP compliant reg monitoring network (part GE/RF/UA)	Jul 20	All partners	To be discussed at the Tech. coordination workshop
<ul style="list-style-type: none"> <li><i>Fine-tuning and further development of the water quality / good environmental status (WQ/GES) classification schemes developed in EMBLAS-II for GE RF and UA*.</i></li> </ul>	<i>Report with proposed methodology of classification schemes, threshold values, biological indicators and environmental targets*</i>	March 2020	IMB, SIO-RAS, UkrSCES	ongoing
<b>Activity 1.3 Facilitate sharing of environmental monitoring data at the regional and European level</b>	<ul style="list-style-type: none"> <li>BS WQD upgraded (new modules); data from the surveys 2016/2017 and 2019 collected together with historical data in the EMBLAS DCTs format, uploaded into BS WQD and available on-line;</li> <li>Data provided to other marine data sharing platforms and available on-line.</li> </ul>			
<ul style="list-style-type: none"> <li>Upgrade of the BS WQD with new modules and related manuals for archiving raw data on zooplankton, ichthyoplankton, benthic habitats, macrophytobenthos, chemicals wide-scope target and suspect screening and passive sampling data, marine litter and marine mammals monitoring data</li> <li>Adding functionalities to the BS WQD allowing interpretation of results, assessing trends and providing input to the BSIMAP</li> </ul>	DCTs developed for new parameters	Ongoing task	UkrSCES, short-term experts	DCTs available for fish and marine mammals
<ul style="list-style-type: none"> <li>Further population of the BS WQD through gathering of new data from the surveys organized during the project, and historical data (including data from PERSEUS and MISIS projects via BSC)</li> </ul>	Historical data converted to DCTs	Feb20	TBC (CFP proposals or STE)	Call for partners launched, plan of activities to be prepared
<ul style="list-style-type: none"> <li>Sharing data with the other European marine data platforms incl. EMODNet, IPCHEM, SeaDataNet, WISE-Marine (EEA), ICPDR's Water Quality Database, EEA (beach litter data), EC JRC (marine and riverine litter data) taking into consideration requirements SEIS</li> </ul>	List of DCTs and datasets shared	Aug 20	UkrSCES, SOI, STEs	ongoing
<ul style="list-style-type: none"> <li>Linking the JBSS 2019 (BSC, EMBLAS) and Joint Danube Survey 4 (ICPDR) scheduled to take place at the same time (May – August 2019). Exchange of the monitoring data and cooperation at their assessment with specific focus on observations at the UA shelf</li> </ul>		May 19 – Jun 20	PMT, TL	The JBSS and JDS organized within agreed time frame



Result 1: National and joint regional monitoring programmes implemented				
Activities	Deliverables overall / Deliverables partial	Month	Responsible	Status
<b>Activity 1.4 Capacity building on novel monitoring methods, quality assurance/quality control and use of the BS WQD</b>	<ul style="list-style-type: none"> <li>A new set of Standard Operational Procedures (SOPs) for novel methodologies;</li> <li>Training materials;</li> <li>Trainings organized on novel methodologies, sampling and data interpretation involving a critical mass of experts able to apply routinely these methodologies in the beneficiary countries.</li> </ul>			
<ul style="list-style-type: none"> <li>Implementation of a set of trainings for the national experts, organized directly in the relevant national laboratories, in the partner laboratories of the EU countries and participation of the individual experts at relevant scientific events.</li> <li>The focus on MSFD, WFD and BSIMAP relevant parameters, novel methodologies (large volume and passive sampling, marine litter, microplastics, e-DNA, marine mammals, ecotoxicology (genotoxicity), satellite monitoring) and implementation of the environmental and ecological status classification schemes. Part of the training to be devoted to statistical analysis of the historical and newly obtained data from the EMBLAS-II/EMBLAS-Plus surveys.</li> <li><i>*Training sessions for experts on the online BS WQD will be organized, with focus on practical use of the database and its functionalities*.</i></li> </ul>	Trainings: <ul style="list-style-type: none"> <li>Marine litter and microplastics monitoring (Jul 19, by EC JRC, EEA and NIVA)</li> <li>Classification schemes, biological indicators, threshold values (May - Dec 19, coordination with ANEMONE)</li> <li>BS WQD</li> <li>Other ad-hoc trainings (e.g. passive sampling, chemical analyses of BS Specific Pollutants)</li> </ul>	Ongoing task	PMT  IMB, SIO-RAS  UkrSCES PMT	Training on ML and Microplastics organized in July 2019, 21 experts Workshop on Classification schemes (Eutrophication and contaminants), organized jointly with ANEMONE in June 2019, 19 experts Training on Passive Sampling 18-19 November 2019, 6 experts
<ul style="list-style-type: none"> <li>Development of a set of SOPs for novel methodologies and the draft SOP for assessment of fish indicators according to requirements of MSFD</li> </ul>	<ul style="list-style-type: none"> <li>SOPs for novel methodologies</li> </ul>	July-Dec2019	STE	Additional SOPs on Large volume sampling with use of Mariani Box, Horizon Sampler and JRC prototype
	<ul style="list-style-type: none"> <li>Draft SOP for assessment of fish indicators according to requirements of MSFD</li> </ul>	May – Dec 19	UkrSCES, ONU	ongoing
<b>Activity 1.5 Support countries to comply with obligations under the Bucharest Convention and EU Association Agreements</b>	<ul style="list-style-type: none"> <li>Proposals of the MSFD/WFD- and BSIMAP-compliant national and regional monitoring networks and other contributions, as needed, to the development of national monitoring strategies;</li> <li><i>*Reports on determination of boundaries of the national marine sub-regions, reference conditions and status assessment thresholds values for selected biological indicators for assessment of coastal, territorial and open sea waters covered by the project activities*;</i></li> <li>List of Black Sea Specific Pollutants and List of Significant Water Management Issues;</li> <li>Parts of Initial Assessment documents for GE and UA.</li> </ul>			

<b>Result 1: National and joint regional monitoring programmes implemented</b>				
<b>Activities</b>	<b>Deliverables overall / Deliverables partial</b>	<b>Month</b>	<b>Responsible</b>	<b>Status</b>
<ul style="list-style-type: none"> <li>Support at drafting of parts of the Initial Assessment in Georgia and Ukraine according to the MSFD methodology, based on the data collected within EMBLAS-II and EMBLAS-Plus – in coordination with the partner governments and relevant donor projects</li> </ul>	<ul style="list-style-type: none"> <li>Draft documents as per consultation with the national stakeholders</li> </ul>	UA – Jun 2019 GE – Dec 2019	PMT, short-term experts, NEA, UkrSCES	Prepared by UkrSCEDS in the form of Scientific Report in Ukrainian
<ul style="list-style-type: none"> <li>Further improvement of the classification schemes assessing ecological status of coastal zone waters and environmental status of territorial waters</li> </ul>	<ul style="list-style-type: none"> <li>Classification schemes for GE, UA, RF</li> </ul>	March 2020	IMB, NEA, SIO-RAS	ongoing
<ul style="list-style-type: none"> <li>Initiating process of the Black Sea region-wide compilation of latest information allowing for assessment of the environmental status (MSFD; territorial waters) and ecological and chemical status (WFD; coastal water bodies) and related identification of impacts (Significant Water Management Issues; SWMIs) and pressures of both national and Black Sea-wide importance</li> </ul>	<ul style="list-style-type: none"> <li>Draft List of Black Sea Specific Pollutants and List of Significant Water Management Issues (in cooperation with other projects in the BS region)</li> </ul>	Feb 2020	PMT, STEs, UkrSCES, NEA, SOI	To be discussed at the Technical Coordination workshop in March 2020, linkage with Activity 1.1

*\* additional deliverable as per fine-tuning of the project work plan suggested during the Inception Workshop*

## 2.2 Result 2: Joint monitoring and reduction of river and marine litter facilitated

Under Result 2, new joint actions will be initiated to reduce the input of marine litter to the Black Sea and support national and local authorities in the implementation of the marine litter reduction measures, including introduction of related good waste management practices (with focus on plastics). Special attention will be given to the involvement of women and young people.

The **key Outputs** include increased availability of information on the marine/riverine/beach litter and microplastics; targeted campaigns and small pilot actions aimed at marine litter reduction.

### Progress of work and delivered results

#### **Activity 2.1 Collecting marine/river/beach litter and microplastics pollution data on a regular basis**

The collection of data on marine/river/beach litter is organized in line with the JRC and EEA methodologies as a part of the national monitoring surveys in Georgia, Russian Federation and Ukraine.

**In Georgia**, TSU has been leading the field work related to the marine litter monitoring, with focus on riverine litter (4 rivers) and beach litter (5 locations). On-site observations were performed for marine floating litter on predefined monitoring treks of sea areas: Batumi, Kobuleti, Ureki, Poti and Kulevi city areas (within 400 m from coastal line).

The riverine observations were carried out on four rivers, as follow: Chorokhi, Natanebi, Rioni and Supsa. Obtained data were delivered to the RIMMEL data base, using mobile application. Beach litter categorization and quantification was done on the following 5 sites,: 1. Sarpi, 2. Kobuleti northern periphery beach; 3. Ureki; 4. Tskaltminda; 5. Maltakva (near Poti). Observations are being carried out from June 2019 till March 2020 and it is planned to have NEA experts involved. TSU is also involved int RedMarLitter and EMODnet and will ensure coordination of relevant activities.

**In Russian Federation**, marine litter monitoring (floating, riverine, beach, microplastic) is part of the monitoring program for both – national and regional (open sea) survey, with the use of the JRC and EEA methodologies. The beach litter monitoring has been performed in Sochi. In EMBLAS-II a full year riverine litter regular monitoring of Don river has been carried out. During EMBLAS-Plus the focus is on smaller rivers (Ashamba, Aderba) in Anapa region, where the monitoring will cover the period with high water. It is also important to catch the input of litter from small rivers, since there are plenty of them on the Russian coast and their contribution in ML pollution is considered to be very high.

**In Ukraine**, UkrSCES is organizing separate activities in the monitoring of the riverine, marine floating litter and beach litter, using the JRC methodology for floating marine and riverine macrolitter and EEA methodology for beach litter. The monitoring of riverine litter began on the Dniester in April 2019 and in May 2019 on the Danube, with using the App of Floating Litter Monitoring (FLM). The beach monitoring (Marine LitterWatch) is scheduled for autumn period at two locations: Chornomorka Beach and Beach in Kurortne village. The floating marine litter and sea bottom litter was observed during NMS (August-October 2019).



## Activity 2.2 Organizing targeted campaigns on marine litter reduction and good waste management practices

### Activity 2.3 Providing assistance to the local communities and municipalities to implement measures aimed at reduction of the marine litter, considering the EU Plastics Strategy<sup>13</sup>

The project activities 2.2 and 2.3 are closely related and aimed at support of good practices in marine litter management through public campaigns and small-scale practical pilot projects. The implementation is partly guided by UNDP, however with involvement of the local schools, communities and NGOs, as well as project partner organizations that have relevant experience. Through “call for proposals” some innovative ideas were collected and being implemented as small scale pilot actions.

Marine litter prevention campaign “Sort Plastic – Save the Sea” in Ukraine completed (April-May 2019). The main idea of the campaign was to make participants of the action to exchange one type of collected plastic (HDPE – plastic marked with 2) for the Black Sea puzzles from recycled plastic, where the marine animals are drawn. The final goal was to collect the whole huge Black Sea puzzle.

The collected plastic from local schools and communities was sent to Odesa to existing laboratory of plastic transformation “Precious plastic” (<https://www.facebook.com/preciousplasticodessa>, <https://preciousplastic.com>;) where it was processed and transformed into the puzzles.



...at the “precious plastics” laboratory



Collecting and sorting plastics

To visualize this initiative a new hero – PlasticChew (Пластикожуй) and a cartoon was created jointly with the MENR of Ukraine (see cartoon at <http://emblasproject.org/archives/2918>).

The cartoon and conditions of campaign was disseminated in April 2019 using: MENR (581 reposts, 21,322 views, 54,000 involved); UNDP Ukraine (223 reposts, 8 607 views); facebook Fans of the Black Sea (61 reposts). Out of 70 registered organizations, 51 organizations and communities have managed to collect and send their plastic to Precious laboratory in Odesa. Most of them were schools and kindergartens. The amount of collected plastic – 877 kg (350,000 of bottle caps) / The number of directly involved people was 6252. The campaign is planned to be replicated in Georgia.



Promotional cartoon created for the campaign “Sort Plastics – Save the Sea”

<sup>13</sup> <http://ec.europa.eu/environment/circular-economy/pdf/plastics-strategy.pdf>

Campaign: 2019 #EUBeachCleanup! - global initiative, in Ukraine under motto "I cleaned – Your Turn 2: Changing the Future Together", organized on 16-30 September 2019. Over 7,000 participants all around Ukraine joined Facebook challenge "I cleaned -It's Your turn 2: Changing the future together". Ukraine became one of the leaders in this initiative: 234 clean ups took place! It is estimated that in total about **35,7 tons of the waste** was collected all around Ukraine.

<http://emblasproject.org/archives/3463>.

The campaign was led by the EU funded projects: EU / UNDP project - EMBLAS-Plus, EUWI+. Ministry of Energy and Environmental Protection of Ukraine, State Agency of Water Resources of Ukraine, Ministry of Education and Science of Ukraine #EUBeachCleanup #Яприбрав\_ТвояЧерга2. The results are reported to the EU Beach Clean Up team in Brussels to be incorporated into the world-wide report <http://emblasproject.org/archives/3547>.



#### Ongoing small-scale projects

##### **Georgia**

Project "Minimization and re-use of solid and specific waste; popularization of green fashion and design", implemented by the Black Sea Eco Academy (BSEA). The key actions are Trainings for children from schools in **the major sea side cities of Georgia** – Batumi, Ureki, Kobuleti and Poti, contest for best ideas practical and artistic items/objects to be produced from re-used second hand materials, 4 dust – bin installed on the central beaches of the 4 target cities.

Project "Tackling Marine Debris in Georgia", implemented by Women's International Shipping and Trading Association Georgia WISTA Georgia. The key activities include 10 public lectures on Marine Litter, 4 beach clean-ups and use of EEA Marine Litter Watch methodology.

The first clean-up took place on 14 November 2019, with participation of 70 persons. A MOU on cooperation between WISTA Georgia and Batumi Boulevard has been signed on tracking marine litter and promoting the Marine Litter Watch application. The first public lecture on importance of the marine biodiversity and harm which is caused by the marine litter was held on 19 November 2019, with 29 participants. The lecture was hosted by the LEPL Maritime Transport Agency of the Ministry of Economy and Sustainable Development of Georgia. Lecture was attended by public and private maritime sector representatives.



Beach clean-up event organized by the NGO WISTA, Batumi, Georgia

Project "Rivers and Black Sea without plastic", implemented by Imereti Scientists' Union "Spectri" – SPECTRI is focused on processing of HDPE waste with use of "precious plastics" technology, training for kids, creation of "upcycling clubs", beach/river clean-up, publication.

## Ukraine

Project “The Black sea coast line of Kherson region without litter”, implemented by NGO «Regional Council of Entrepreneurs». The key actions are:

- Clean-up of 14 km of wild coast line – 3 villages;
- Awareness raising with local businesses, schools, trainings for recycling and upcycling;
- Organizing containers, sorting stations.

Project “Arrangement and cleaning of recreational areas of the National Park “Biloberezhzhia Sviatoslava”, implemented by Community organization “Kinburn. The key actions are:

- Conservation and restoration of endemic and rare vegetation at the “Kinburn Spit” and “Kovalivska” recreational sites;
- Awareness of the population and visitors of the park in sorting household waste to preserve the local landscape;
- Installations to avoid contamination of the sandy area.

Project “Illiquid plastic. New life in Recycled Tiles”, implemented by Civic organization «Agency for Social Change». The key actions are:

- Introducing new technology for processing illiquid plastics (e.g. plastic bags, spoon, cups);
- Interactive education of children; working with 10 schools in Kutaisi; Collection points for illiquid plastics in Odessa, waste separation points;
- Production of tiles from recycled plastics.

## Russian Federation

Project “The Black Sea Awareness Campaigns ”, implemented by NGO Znau Lublu. The key activities include organization of educational and public awareness events in schools and children summer camps on the Russian coast; conducting the monitoring activities in collaboration with Ecological biological Sochi Center; Extend marine litter monitoring activities and to improve the data quality and dissemination of the “Black Sea SaveBook” mobile application after its re-launch.

### Planned activities in the follow-up period

#### **Activity 2.1 Collecting marine/river/beach litter and microplastics pollution data on a regular basis**

The activities related to the monitoring of marine/river/beach litter and microplastics pollution shall continue, including the preparation of technical reports and assessments.

#### **Activity 2.2 Organizing targeted campaigns on marine litter reduction and good waste management practices**

Joint Ukrainian-Georgian marine litter monitoring by schools: it is planned to conduct a training on Marine Litter Watch application for three selected schools in three coastal oblasts in Ukraine (Odesa, Mykolaiv, Kherson) (nine schools in total) in March 2020. The main goal is to stimulate them to conduct their own research of marine litter. In Kherson it will be done in synergy with the project “The Black sea coast line of Kherson region without litter”. In Georgia jointly with pilot Project “Tackling Marine Debris in Georgia” and involving additional schools (e.g. Poti). It is also planned to conduct the relevant training. The very final goal is to support direct exchanges between schools of the two countries on the topic of marine litter research and later make a joint presentation in parallel to the Project press-conferences on the results of JBSS.

#### **Activity 2.3 Providing assistance to the local communities and municipalities to implement measures aimed at reduction of the marine litter, considering the EU Plastics Strategy<sup>14</sup>**

The Project will continue to support pilot projects implementation and sharing their best practices at different levels. In Ukraine in frame of the pilot project “The Black sea coast line of Kherson region

<sup>14</sup> <http://ec.europa.eu/environment/circular-economy/pdf/plastics-strategy.pdf>

without litter”, it is planned to conduct Sustainable market forum. Its main idea is to unite entrepreneurs, working in the beaches (coffee shops, hotels, street food etc.) and to explain them the dangers of single use plastics and at the same time invite alternative “green” suppliers for P-free detergents, corn straws, biodegradable packages, recycled paper wrapping etc. This will be additionally supported by the project and promoted to higher level (by speakers, submitting the latest information on the marine litter). If successful (and it has a chance to be successful because of the support of Kherson Oblast Administration, who directly influence these entrepreneurs) it will lead to rapid decrease in litter production.

The exhibition of the environmentally friendly replacements of the 10 most found plastic waste items will be part of it. The project will promote additionally waste upcycling methodology (production of tiles from illiquid plastic to be developed in frame of the pilot project in media and among the stakeholders).

Using the positive experience of the Ukrainian campaign “Sort the Plastic – Save the Sea” and in cooperation with the Georgian pilot project “Rivers and Black Sea without plastic”, which will establish a laboratory of recycled plastic, a ground for the replication of the campaign in Georgia will be created.

**Overview on overall deliverables, expected results and indicators of achievements**

<b>Result 2: Joint monitoring and reduction of marine litter facilitated</b>				
<b>Activities</b>	<b>Deliverables overall / Deliverables partial</b>	<b>Month</b>	<b>Responsible</b>	<b>Status</b>
<b>Activity 2.1 Collecting marine/riverine/beach litter and microplastics pollution data on regular basis</b>	<ul style="list-style-type: none"> <li>BS WQD module for data from the riverine and marine litter monitoring and from monitoring of microplastics pollution;</li> <li>Data on beach litter monitoring provided to the existing online database of EEA (Marine LitterWatch);</li> <li>Analysis of collected data and assessment of trends in marine litter and microplastics pollution.</li> </ul>			
<ul style="list-style-type: none"> <li>Carry out regular monitoring of the floating litter input from the main rivers discharging to the Black Sea using the EC JRC methodology and related mobile application (RIMMEL)</li> </ul>	<ul style="list-style-type: none"> <li>Floating litter input monitored at selected locations</li> </ul>	May 2019 – May 2020	UkrSCES, TSU, SOI	ongoing
<ul style="list-style-type: none"> <li>Organise regular collection of the data on floating marine litter using the EC JRC methodology and related mobile application (RIMMEL)</li> </ul>	<ul style="list-style-type: none"> <li>ML data collected during the national surveys, data provided to RIMMEL database and BS WQD</li> </ul>	Oct 2019 / Jan 2020	SOI, SIO-RAS, UkrSCES, TSU	Data collected, being analysed by EC JRC, tech. reports TSU available
<ul style="list-style-type: none"> <li>Establish regular monitoring scheme for beach litter with the use of EEA Marine LitterWatch approach, store the data in on-line EEA database and analyse the type and amount of waste</li> </ul>	<ul style="list-style-type: none"> <li>Proposal of schemes for regular monitoring of beach litter in each country</li> </ul>	Feb 2020	SOI, UkrSCES, TSU/NEA	ongoing
<ul style="list-style-type: none"> <li>Develop and test monitoring scheme for microplastics in the Black Sea</li> </ul>				to be discussed
<b>Activity 2.2 Organizing targeted campaigns on marine litter reduction and good waste management practices</b>	<ul style="list-style-type: none"> <li>Educational, awareness raising and “good waste management practices” materials;</li> <li>Targeted campaigns and trainings to schools/CSOs organized together with beach clean-up activities</li> <li><i>Trainings for teachers from primary and high schools on marine litter pollution issues and methods of public environmental monitoring*</i>;</li> <li><i>Campaigns in local schools, universities and local communities on necessity of the environmental protection and marine litter pollution reduction*</i>;</li> <li><i>A report on results achieved, including number of reached people with gender disaggregation of data*</i>.</li> </ul>			
<ul style="list-style-type: none"> <li>Provide trainings/education activities to schools, local communities, NGOs / civil society organizations, etc. on environmental sentinels and/or marine litter monitoring and reduction;</li> <li>Provide trainings for schools on Methods of the public environmental monitoring with focus on marine litter monitoring using Marine LitterWatch;</li> </ul>	<ul style="list-style-type: none"> <li>Communication campaign “Sort and transform plastic – Save the Sea”</li> <li>Exhibition of the environmentally friendly replacements of the 10 most found plastic waste items as a part of Sustainable market forum for local business</li> <li>Trainings for selected schools in application of MWL and support joint scientific surveys on this</li> </ul>	April 2019 June 2019  Sept 2019 March 2020	Project team, partners/NGOs	Campaign “Sort the plastics – save the sea” in Ukraine, to be replicated in GE BS Savebook re-launch planned in 2020



<b>Result 2: Joint monitoring and reduction of marine litter facilitated</b>				
<b>Activities</b>	<b>Deliverables overall / Deliverables partial</b>	<b>Month</b>	<b>Responsible</b>	<b>Status</b>
	topics and comparison of results between schools in Ukraine and Georgia			
<ul style="list-style-type: none"> <li>Produce educational materials on importance of the marine litter / microplastics issue and related good waste management practices</li> </ul>	<ul style="list-style-type: none"> <li>Infographics on marine litter in the Black Sea</li> <li>Cartoons</li> </ul>	May 2019	Project team	1 infographics on ML; 2 cartoons on Plastikozhuy and "I cleaned – Your turn 2"
<ul style="list-style-type: none"> <li>Organize clean-up activities (e.g. in the frame of the Black Sea Clean Beach Day)</li> </ul>	<ul style="list-style-type: none"> <li>See act 3.2 for more details</li> </ul>	Sept 2019- August 2020	Project team, partners/NGOs	ongoing
<b>Activity 2.3 Providing assistance to the local communities and municipalities to implement measures aimed at reduction of the marine litter, considering the EU Plastics Strategy</b>	<ul style="list-style-type: none"> <li>Proposed measures for reduction of the marine litter pollution;</li> <li>Small scale pilot actions implemented;</li> <li>Support at the development of a national / local legal acts aiming at the ban or reduction of Black Sea priority litter items.</li> </ul>			
<ul style="list-style-type: none"> <li>Based on the analyses from the collected data, propose relevant measures to decrease the marine litter pollution at the national and BSC level (links with the recently approved EU Plastics Strategy)</li> </ul>	<ul style="list-style-type: none"> <li>Based on the results of the pilot projects implementation</li> </ul>	May 2020	Project team, partners/NGOs	To be discussed
<ul style="list-style-type: none"> <li>Involve municipalities and local companies and support pilot small scale projects for plastic waste collection-separation-recycling-reuse</li> </ul>	<ul style="list-style-type: none"> <li>Pilot actions (e.g. on sorting waste, secondary waste use and recycling and upcycling)</li> </ul>	Aug 2019	Project team - CFP to be launched	CFP launched, 6 projects being awarded
<ul style="list-style-type: none"> <li>Promote drafting/introducing national legal acts aiming at, e.g. bans or reduction of use of plastic bags, plastic packaging (in supermarkets) and other litter items frequently found in large amounts on Black Sea beaches (e.g., plastic forks, straws, ear cleaner tips, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>If requested by the beneficiaries and in support of the available draft legal acts</li> </ul>	TBD	Project team	To be discussed

\* additional deliverable as per fine-tuning of the project work plan suggested during the Inception Workshop

## 2.3 Result 3: Environmental public awareness and education campaigns conducted

Under Result 3, public awareness on environmental issues related to the Black Sea will be further increased through organizing public events, educational campaigns with focus on biodiversity, clean-up and restoration activities for the Black Sea. It is foreseen to strongly involve Civil Society Organizations, academic and scientific institutions to ensure the sustainability and replicability of the public awareness activities and events. Special attention will be given to involvement of women and young people.

The key Outputs include increased public awareness on environmental topics related to the Black Sea, its biodiversity and ecological values, strengthened involvement of the local communities, national civil society organizations, NGOs, academic and scientific institutions in environmental protection and further development of the Black Sea Savebook application.

### Progress of work and delivered results

#### Activity 3.1 Organizing educational / public awareness events, linked to Joint Black Sea Surveys and "Black Sea SaveBook" application and strengthen the role of women in the environmental protection

At the occasion of the Joint Black Sea Survey 2019 two press-conferences were organized in Ukraine and Georgia.

Press-conference in Odessa was held on 29 July 2019 (<http://emblasproject.org/archives/3276>).

The key presentations were given by the EMBLAS-Plus team Leader, PR Expert, Director of Institute of Marine Biology in Odesa and Deputy Minister of MENR Ukraine. The press-conference in Ukraine has

Ukraine: 11 TV channels, 102 participants (57-men, 55 - women)  
Georgia: 5 TV channels / 53 participants (21 men/ 32 women)

resulted in more than 120 articles and TV-reports. The issue of the Black Sea health were in top news of the country for two weeks.



Press event in Odessa

Press-conference in Batumi was held on 5 August 2019 (<http://emblasproject.org/archives/3431>). The key presentations were given by EMBLAS-Plus Team Leader, Deputy Minister of Ukrainian MENR, Deputy Minister of Georgian MEPA, UNDP Georgia and EU delegation, NEA.

<https://www.facebook.com/groups/1660089820968698/permalink/2247420672235607> (FBS)

<https://www.facebook.com/media/set/?set=a.2326083650772951&type=3> (UNDP) and

<https://www.facebook.com/media/set/?set=a.2528305903888149&type=3> (NEA).



Mykola Kuzio,  
Deputy Minister, MENR Ukraine



Nino Tandilashvili,  
Deputy Minister, MEPA Georgia

press conference in Batumi

A special informational campaign in Ukraine and Russian Federation was devoted to the study of cetaceans and its highlighting in press. In Ukraine jointly with CeNoBS, the results of avia calculation of the dolphins were highlighted jointly with marine coastal waters calculations done by EMBLAS-Plus project in frame of national monitoring studies <http://emblasproject.org/archives/3047> This news were many times replicated in media. In Russian Federation an aerial monitoring marine mammals studies on the Black Sea field surveys “Flight with Dolphins” conducted in the frame of the EMBLAS-Plus project” in cooperation with other partners also brought a lot of media interest <http://emblasproject.org/archives/3522>.

Press-conference on the Danube Day 2019 in Ukraine. On the 29th of June each year, the 14 countries of the Danube Basin jointly celebrate one of Europe's greatest river systems and the people and wildlife that rely on it. In Ukraine the event took place at the Kiliya, Danube bank. The event included press conference, where special attention was paid to the connection of the Joint Danube Survey 4 and Joint Black Sea surveys organized by the EMBLAS-Plus project.

As a side event a boat trip to “0 km” (where Danube enters the Black Sea) has been organized by EMBLAS-Plus. The participants (74) - water managers from all over Ukraine, experts form research institutes, NGOs, local communities and journalists learned about the impact of Danube at the Black Sea. <http://emblasproject.org/archives/3081>, <http://www.danubeday.org/ukraine>. The event has been also supported by the State Agency of Water Resources of Ukraine, MENR, EUWI+ Kiliya local authorities.



Trip to the KM “0”,  
where the Danube enters the Black Sea

### **Activity 3.2 Organizing of the “Black Sea Clean Beach Day” and other actions**

A number of events were organized at the occasion of the Black Sea Clean Beach Day and the Black Sea Day in Georgia, Russian Federation and Ukraine.

#### **Georgia**

On 28 September 2019, around 200 kids from different schools of Poti came to clean the beach. The project has sent them the bags to reward for their activities.

On 30 September 2019, in the frame of the “Festival of Science and Innovation” an Exhibition of the EMBLAS Infographic has been organized in the Hall of the main building of Tbilisi State University and attended by all institutions of Higher education of Georgia. The aim of the Exhibition was to promote goals and achievements of the EMBLAS project <http://emblasproject.org/archives/3516>.

On 31 October 2019 a Scientific workshop dedicated to the International Black Sea Action Day has been organized in Poti, by Iv. Javakhishvili Tbilisi State University (TSU) in close collaboration with the Municipality of City of Poti and the State Hydrographic Service (SHS). The objectives of the workshop was to promote the activities of the project, underline importance of the results obtained during the monitoring of the marine environment, increase environmental awareness in the local communities and stakeholders, as well as involve young people in the implementation of the project.



Participants of the Scientific Workshop in Poti.

The workshop has been part of the activities of TSU related to the 2<sup>nd</sup> round of the expeditions on Marine Litter monitoring, with participation of the scientists and students carrying out field works. The event has been attended also by a wide range of representatives from governmental and private agencies, scientific and public education (universities and schools) institutions and NGOs (34 participants <http://emblasproject.org/archives/3567>).

### Russian Federation

During the period 1-27 October 2019 Ecological creative competition "We are for the clean seas". has been launched among Sochi schoolchildren. The competition was attended by 37 classes (about 1000 children) from 15 schools. To participate in the competition, teachers needed to carry out an action with the children to clean up the coastal zone and do creative work on the ecology of the Black Sea.

On 27 October 2019 an environmental action dedicated to the Black Sea Day was held on the central square of Sochi, which included an exhibition of the Black Sea infographics. The ecological competition winners were awarded and received certificates and the opportunity to hold an action in their school together with the participants of the EMBLAS-Plus project.



Exhibition of the Black Sea Infographics in Sochi

On 30 October 2019 a lecture on marine litter and an action on cleaning the beach in Sochi using the Marine Litter Watch application has been provided for 44 children (17W, 24M) and 8 adults (5W, 4M).

On 31 October 2019 a master class for eco activists on the creation of eco-bags and the opening of a museum of marine litter was held. The participants were 18 children (8M, 10W), 5 teachers (4W, 1M) and the media <http://emblasproject.org/archives/3636>.

## Ukraine

In order to promote International Black Sea Day, in Ukraine a Facebook challenge "Greet the Black Sea with its "birthday"!" was announced. The task of the challenge was to get together with friends, record video greetings to the Black Sea and share it in the Facebook. The participants of the challenge got a set of infographics on current state of the Black Sea as a present <http://emblasproject.org/archives/3575>.



Nerubayskaya school № 2 Odessa region - kids received the Black Sea infographics as a reward for their video congratulations

As a part of the 2019 #EUBeachCleanup campaign, on 20 September 2019 "Tiligul Ecofest" was organized by the NGO "Association of Leaders of Tourism Business in Mykolaiv region", Department of Youth and Sport of Mykolaiv Oblast State Administrations and NNP "Tiligul Iymans".

EMBLAS-Plus has been one of the partners at the festival. The programme of the festival included clean-up of the marine resort area at National Nature Park "Tiligul Iymans", filling out Marine Litter Watch protocols and lecture on danger of marine litter. In total, 220 kids took part in the event. Three TV-channels were reporting about this event as well as it was widely shared in the Facebook <https://newsvideo.su/video/11492574>.

This initiative was a part of Facebook challenge initiative, in Ukraine under motto "I cleaned – Your Turn 2: Changing the Future Together" <http://emblasproject.org/archives/3463>, organized on 16-30 September 2019. Over 7,000 participants all around Ukraine joined Facebook challenge "I cleaned - It's Your turn 2: Changing the future together". Ukraine became one of the leaders in this initiative: 234 clean ups took place! We can estimate that in total about **35,7 tons of the waste** was collected all around Ukraine. The campaign was led by the EU funded projects: EU / UNDP project EMBLAS-Plus, EUWI+. Ministry of Energy and Environmental Protection of Ukraine, State Agency of Water Resources of Ukraine, Ministry of Education and Science of Ukraine #EUBeachCleanup #Яприбрав\_ТвояЧепра2. The results are reported to the EU Beach Clean Up team in Brussels to be incorporated into the world-wide report (<http://emblasproject.org/archives/3547>).

### Activity 3.3 Further dissemination of the project results and visibility

This project activity is focused on the promotion of the scientific results and findings of the project on the status of the Black Sea, as well as on strengthening visibility of the project and the role of EU and UNDP. The implementation is led directly by UNDP project team, in cooperation with the communication teams of EU Delegations and UNDP Country Offices.

#### Infographics

In frame of EMBLAS-II, cooperation with Cousteau Society was successfully started. The first infographics "The Black Sea at glance" was produced, showing the main pressures and assets of the Black Sea. Within the EMBLAS-Plus, additional infographics were produced in 4 languages (EN/GE/RU/UA) on Hypoxia, Biodiversity, Chemical Pollution, Marine Mammals – Dolphins, Marine Litter <http://emblasproject.org/visibility>.

Infographics became rather popular and liked by the wide public, as they are clearly presenting the finding of the project. They are used during the project events and widely disseminated. Cooperation with the Cousteau Society has brought additional international dimension to the project results dissemination and at the same time allowed to present results in the comparable way with other seas and oceans.

The exhibition of infographics was held in Ukraine and Georgia as a part of press-conferences and scientific workshops. Later the same set of infographics became a permanent exhibition in UkrSCES

and in Georgia in NEA Department of Marine Monitoring in Batumi. The infographics were also presented at the events organized for Ukrainian journalists.

The infographics in A4 format were largely distributed for journalists and shared during an Informative session with EC services in Brussels (September 2019). The infographics are frequently used by experts at their presentations at various fora. There are permanent requests from schools and universities to get these infographics printed as additional modern informational materials.

A special quiz "To which marine inhabitant are you alike by your knowledge?" for wide public has been prepared and posted at the project facebook page "Fans of the Black Sea, to test, what kind of information a person got from the poster.

#### BBC documentary about the Black Sea

The project facilitated preparation of a BBC movie about the Black Sea (BBC journalists joined the JBSS cruise with Mare Nigrum). The film on the Black Sea is going out early December 2019 on BBC News TV (UK only) and BBC World News TV channel (global). A digital video (on the website), short TV versions (BBC World News) and radio (BBC Radio 4 and BBC World Service) being released by the end of November 2019. There will also be a film in Russian and a series of video in Ukrainian later on.

#### Updating the project web-site and the Facebook group "Fans of the Black Sea"

The EMBLAS I and EMBLAS-II had the same web-site ([www.emblasproject.org](http://www.emblasproject.org)), which is further sustained and updated for the content and structure. (No. of visitors as of November 2019: 13,374, no. of views: 33,610 (previous count in November 2018: 6,836 visitors, 17,850 views).

In frame of the EMBLAS-II Facebook group "Fans of the Black Sea" was established. The current membership is 1008 persons as of November 2019 (group established in September 2016, previous count in November 2018: 502 members). It is worth of mentioning that working with regional press and regions as such besides Kyiv and Odesa supported the enlargement of the group.

#### Working with journalists

Besides the event at the Ukrainian Danube Day 2019, on 29 June 2019, at the Danube Delta, with the field trip, where local journalists from Odessa were present, the project participated in two other events for the Ukrainian journalists:

- Press-tour event for the Ukrainian journalists "Support to the EU Delegation to Ukraine with media related activities" on 24 April 2019 in Odessa, which included field presentations about the EMBLAS-Plus project and resulting in more than 20 articles and video reports. The event has been attended by 32 participants (14 men / 18 women).
- 4<sup>th</sup> module of UNDP School of Environmental Journalists – Southern region on 9<sup>th</sup> of October 2019 in Odesa, where the project results / activities were presented, as well as the key environmental issues of the Black Sea. The event included exhibition of the Infographics developed for the project by Cousteau Society. As a result, more than 10 articles and video reports were published. The event has been attended by 26 participants (4 men / 22 women).

Visits to coastal cities of Ukraine Mykolaiv and Kherson on 12 and 14 November 2019. After the schools with regional journalists, there were a number of requests coming from coastal cities (NGOs and journalists) in Ukraine to learn more about the Black Sea issues, about the project and have presentation of the Cousteau infographics for them. Traditionally most of PR events of the project were concentrated in Odesa and Kyiv, so such invitations were much appreciated.

Such invitations came from Mykolaiv (NGO "Association of Tourism Development in Mykolaiv region") and Kherson (NGO «Regional Council of Entrepreneurs» – the NGO, who got awarded the pilot project from EMBLAS-Plus). Details on the visits are <http://emblasproject.org/archives/3603>.

EMBLAS Information session for EU institutions and Member States took place on 23 September 2019 at EC DG NEAR in Brussels. The purpose of the meeting was to: (i) provide an overview on the key

achievement of the EU-UNDP cooperation in the Black Sea, in particular within the “Environmental Monitoring in the Black Sea” (EMBLAS) Project; (ii) present actions planned within the on-going phase of work, and iii) discuss needs for future action and support from the European Union. The event has been attended by representatives from DG NEAR, DG MARE, DG Environment, EC JRC, EEA and UNDP Brussels.

#### Presentation of project at events organized by other projects and institutions

The project has been presented at a number of national and international events, where the presentations were given by the project team or by the experts from the project partner institutions:

- High-level International Conference on “Inter-basin Cooperation on Marine Litter: a focus on the Danube River and the Black Sea” (4 April 2019, Sofia);
- The Black Sea Commission Advisory Group meeting, 16-17 April 2018, Istanbul, Turkey (Jaroslav Slobodnik);
- Press event organized by EU Delegation Ukraine “Support to the EU Delegation to Ukraine with media related activities” on 24 April 2019 in Odessa (Olena Marushevska);
- UN environmental forum “Individual solutions” – UNDP Ukraine, 14 May 2019, Kiev (Olena Marushevska);
- ANEMONE workshop on 18-19 June 2019, Istanbul, Turkey with participants from all Black Sea countries (Jaroslav Slobodnik);
- Odesa 5T Investment Promotion Forum, 3-4 October 2019, Odessa, Ukraine (Galina Minicheva, IMB Topics “State of the Black Sea and regional economic potential”);
- 4th module of UNDP School of Environmental Journalists – Southern region on 9 October 2019, Odesa (Viktor Komorin - UkrSCES, Borys Alexandrov - IMB, Olena Marushevska);
- 4-7 October 2019, Istanbul – meeting of ACCOBAMS (CenoBs) (Pavlo Goldin, UkrSCES) – presentation of the results of cetaceans surveys in frame of EMBLAS-Plus and Cousteau infographics;
- The Black Sea Commission Meeting, 17 October 2019, Istanbul, Turkey (Vladimir Mamaev, Marcela Fabianova - UNDP);
- EUWI+ event: National Water Policy Dialogues, 6 November 2019, Kyiv, Ukraine (Viktor Komorin, UkrSCES) <https://www.facebook.com/notes/euwi/national-policy-dialogues-benefits-of-eu-solutions-for-water-management-in-ukrai/563778751049586/>;
- Regional Stakeholders Conference on ‘Black Sea Synergy: the way forward’, 7 November 2019, Athens, Greece, organized by International Centre for Black Sea Studies (ICBSS) (Jaroslav Slobodnik: EMBLAS-Plus: Implementation of the EU marine and water policy in the Black Sea region).

#### **Planned activities in the follow-up period**

##### BS Savebook re-launch

**The “Black Sea SaveBook”** is one of the successful products of the previous project phase EMBLAS-II. It is a mobile phone application developed as a tool for public monitoring of the Black Sea in the context of the Environmental Sentinels Monitoring (programmed for androids and i-phones, and in four languages: English, Russian, Ukrainian, and Georgian (<http://emblasproject.org/archives/2112>)). This application helps collecting data on the specific molluscs and algae ('Sentinels' - indicators of the 'good' Black Sea status), as well as marine litter and dolphins. This application is an interactive game primarily targeting young generation - increase the interest of youth in the Black Sea environment.

Due to the success of the game, it is planned to upgrade and re-launch it. The game will be amended using the results of the testing in 2017 (adding some of the most spread mollusks like rapanas and mussels to involve children also in the places where sentinels do not live plus simplification of the explanation how to identify the species, computer vision to simplify the work of administrator etc.). The second spin-off of the game (including trainings, placing the earlier developed social advertisement, announcement of the second round of the game with presents in the end) will be conducted. The web-

based electronic automatic database for results registering will be established. The process will finish by registering of the game as proposed educational product with the relevant Ministries of Education. The assessment of the current involvement of women in the protection of the Black Sea will be done jointly with preparation and implementation of a set of recommendation to strengthen the role of women where relevant.

A short movie about the results of work

**Development of the second part of the underwater movie** “Just like us: stories of underwater life”, based on real underwater shootings provided by IMB with the focus on the dangerous affect of marine litter.

Publication

It is planned to prepare two we publications “New findings of the JBSS (2016-2019)” (public summary and fact sheets to it for wide public) and “Stories of the Black Sea” (for schools with the new information on the Black Sea).



**Overview on overall deliverables, expected results and indicators of achievements**

<b>Result 3: Environmental public awareness and educational campaigns conducted</b>				
<b>Activities</b>	<b>Deliverables overall / Deliverables partial<sup>15</sup></b>	<b>Month</b>	<b>Responsible</b>	<b>Status</b>
<b>Activity 3.1 Organizing educational / public awareness events, linked to Joint Black Sea Surveys and “Black Sea SaveBook” application and strengthen the role of women in the environmental protection</b>	<ul style="list-style-type: none"> <li>Educational and public awareness events / campaigns and <b>press-conferences</b> linked with the JBSS;</li> <li>Re-launch of the BSSB application;</li> <li>Visualisation of the collected results;</li> <li>Situation analysis – the role of women in the Black Sea protection and Set of recommendations implemented to strengthen the role of women.</li> </ul>			
<ul style="list-style-type: none"> <li>Public events and press-conferences at the occasion of monitoring Joint Black Sea Surveys in 2019, with side events (e.g. lectures on environmental sentinels monitoring, marine litter waste management and good practices)</li> </ul>	<ul style="list-style-type: none"> <li>Press-conferences about the results of the surveys (incl. media info, press-releases, etc)</li> <li>Promotional materials for JBSS - Set of promo items for the monitoring cruises (t-shirts, caps, bags, etc)</li> <li>Public presentation and discussion of the draft Marine Strategy (if requested by beneficiary)</li> </ul>	April 2019-Sept 2020	Project	2 press conferences organized in GE/UA Promo items produced and distributed
<ul style="list-style-type: none"> <li>Re-launch of the Black Sea Savebook application – for use by general public, with new functionalities (improving input into on-line database, visualisation of collected results, quality check, response to queries)</li> </ul>	<ul style="list-style-type: none"> <li>Game relaunched</li> <li>Interactive map for collected results is developed</li> </ul>	Sept 2019	Project	Re-launch postponed to 2020
<ul style="list-style-type: none"> <li>Assess the current involvement of women in the protection of the Black Sea, prepare and implement a set of recommendation to strengthen the role of women</li> </ul>	<ul style="list-style-type: none"> <li>Report with recommendations</li> </ul>	March 2020	Project	To be discussed
<b>Activity 3.2 Organizing of the “Black Sea Clean Beach Day”</b>	<ul style="list-style-type: none"> <li>“Black Sea Clean Beach Day” organized in all beneficiary countries;</li> <li><i>Campaigns, pilot actions supporting good environmental status of the Black Sea*.</i></li> </ul>			
<ul style="list-style-type: none"> <li>Organizing Black Sea Clean Beach Day in each project country, linked with the river bank/ beach /protected areas clean-up activities;</li> </ul>	<ul style="list-style-type: none"> <li>Events are organized in Sept–Nov 2019 (possibly also in 2020) in all three countries</li> </ul>	Sept-Nov 2019 and in-2020	Project	BS CBD events organized in all 3 countries
<ul style="list-style-type: none"> <li>Organize campaigns and measures to support good environmental status of the Black Sea / Involving Civil Society Organizations and NGOs active in the field of environmental protection, as well as local authorities and associations.</li> </ul>	<ul style="list-style-type: none"> <li>Pilot actions (e.g. on dolphins protection, prevention of organic pollution)</li> </ul>	Aug 2019	CFP to be launched	CFP launched, evaluated, contract being awarded

<sup>15</sup> As per input from the Responsible Parties, i.e. partner organizations presenting their draft proposals for implementation of specific activities

Result 3: Environmental public awareness and educational campaigns conducted				
Activities	Deliverables overall / Deliverables partial <sup>15</sup>	Month	Responsible	Status
<b>Activity 3.3 Further dissemination of the project results and visibility</b>	<ul style="list-style-type: none"> <li>• <i>Publications*</i>;</li> <li>• <i>Short movies*</i>;</li> <li>• <i>Touring exhibitions / infographics*</i></li> <li>• <i>Updates at the project website and Facebook*</i></li> </ul>			
<ul style="list-style-type: none"> <li>• Follow-up publication on “Revealing secrets of the Black Sea” - a public version of the Scientific Report from the Joint BS Surveys;</li> <li>• A series of publications /brochures and short video productions translating the scientific results into messages understandable by general public;</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Brochure “Further discovery of the Black Sea: deeper, closer and in more detail” (public reports on surveys 2017/2019)</li> <li>• Brochures on initial assessment of the Black Sea marine waters (based on the Joint Black Sea Surveys) and monitoring schemes</li> <li>• Movie “Just like we – 2” prepared and disseminated in four languages</li> <li>• Infographics</li> </ul>	April 2019 / Sept 2020	TBC	4 infographics prepared (the Black Sea at a glance, hypoxia, dolphins, biodiversity, pollution)
<ul style="list-style-type: none"> <li>• <i>Touring exhibition on the Black Sea (jointly with the Cousteau Society – tbd)*</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Exhibition presented in three project countries as well as in EU and Turkey*</i></li> </ul>	August 2019 June 2020	project	Exhibitions in Ukraine and Georgia in several cities and locations
<ul style="list-style-type: none"> <li>• Project website and Facebook page “Fans of the Black Sea” regularly updated with new events;</li> </ul>	<ul style="list-style-type: none"> <li>• Web-site and FB group updated</li> </ul>	permanently	Project	35 news posts on the project activities The project facebook page “Fans of the Black Sea” updated, 1008 users

\* additional deliverable as per fine-tuning of the project work plan suggested during the Inception Workshop

## 2.4 Result 4: Management and coordination of the project ensured

Under Result 4, smooth implementation of the project will be ensured, including financial accountability, production of quality deliverables, reports prepared according to the donor requirements and submitted in due time, strong cooperation in between the partners and with relevant international institutions and relevant initiatives.

The key Outputs include effective and efficient project implementation, including management of Calls for Proposals in full synergy with activities of the Cross-Border Cooperation Programme (CBC) in the Black Sea, as well as strong cooperation among the project partners and with relevant international institutions and initiatives. The project will cooperate with a number of various national and international stakeholders. The project partners that will be involved in the implementation of specific activities as Responsible Parties, will be selected through "calls for proposals".

### **Progress of work and delivered results**

#### **Activity 4.1 Organizing the project coordination meetings and maintenance of the project Intranet**

The Steering Committee and the Inception Workshop have been organized on 21-22 February 2019 in Istanbul at the premises of UNDP Istanbul Regional Hub. The event has been chaired by IRH Manager and EC DG NEAR Team Leader for Connectivity, attended by the SC members from the primary beneficiary countries, representatives of the national organizations involved in the marine environment monitoring and relevant projects (EUWI+, ANEMONE) and institutions (EEA, ACCOBAMS). The purpose of this events was to formally kick-off the new phase of the project, confirm the planning of the project activities, including the thematic areas of planned calls for proposals and approve the workplan for the year 2019. The follow-up Inception Workshop discussed the technical issues of the project implementation, in particular details on the involvement of the partner institutions. It has been agreed, that next SC meeting will be held in February 2020, possibly back to back with a larger technical workshop which will discuss the scientific results of the projects, related to the monitoring activities.

Similarly, as in the previous project phases, the project intranet is used as a working platform for sharing the scientific reports and data.

#### **Activity 4.2 Organizing two rounds of Calls for Proposals**

The 1<sup>st</sup> Call for the draft proposals (Call for partners) for organizing the Black Sea monitoring surveys, collection and assessment of environmental pollution data and marine litter public awareness campaigns has been launched for the period 5-19 February 2019.

The topics of the call were presented at the Steering Committee Meeting and Inception Workshop organized on 21-22 February 2019. In total 6 proposals were received from national institutions, they were briefly presented at the Steering Committee meeting and in more details discussed at the Inception Workshop. The Steering Committee agreed that the proposals from the partners will be further finetuned with the partners bilaterally with the project management team, in order to ensure complementarity, avoid overlaps and fit to the project work plan. The finalized proposals were submitted to the SC members for approval prior relevant contractual arrangements.

The 2<sup>nd</sup> Call for proposals (small value grants) for implementing measures aimed at reduction of pollution of the Black Sea basin by the marine/beach/river litter, awareness raising on various environmental issues and public involvement in the protection of the Black Sea basin environment has been launched on for the period 15 July – 9 August 2019.

As per the UNDP POPPs, the Call documentation, selection criteria and the composition of the Grant Selection Board has been approved by the Project Steering Committee. The final selection of the grants has been consulted with the EC Programme Manager. In total 14 proposals were received, (1 from Bulgaria, 4 from Georgia, 9 from Ukraine), two of them were considered as not eligible and 6 were recommended for funding.

The 3<sup>rd</sup> Call for proposals (Call for partners) for further development and extension of the Black Sea Water Quality Database and collection of the historical environmental data has been launched for the period 3-30 September 2019. In total 6 proposals were received and they are currently under review.

#### **Activity 4.3 Organizing procurement and recruitment and call for proposals**

The Final Meeting of the Steering Committee for EMBLAS-II recommended to initiate implementation of activities of EMBLAS-Plus immediately after the signature of the Contract between EC and UNDP. Therefore, the 1<sup>st</sup> draft for calls for proposals was launched prior to the Inception Workshop in order to identify key partners for project implementation, in particular to be involved in the monitoring activities.

##### The Project Team and experts:

Project Management Advisor (Team Leader) provides management advisory services in the project implementation and planning, advise on the work of other short-term experts, national project partners, provide quality control on produced outputs, including studies, surveys, preparation of technical and scientific reports. The Team Leader liaise directly with the representatives appointed by the ministries in the Project Steering Committee, the national focal points, provide management advice to the team of project experts, facilitate cooperation with other relevant projects, initiatives, EU (in particular the Joint Research Centre) and international institutions, EU Member States and other stakeholder.

Water Programme Analyst contributes to the project reporting and monitoring, drafts technical specifications and organizes recruitment of short-term experts/experts, procurement of services, calls for proposal and contractual arrangements and follow-up activities.

Public Relations Expert supports the project implementation in the activities related to public communication and promotion of project results, with particular attention to the PR activities related to the monitoring cruises, awareness raising campaigns, public events, grant programs and dissemination and promotion of the project results.

Project Assistant provides administrative and logistic support for the project implementation and support the project team, which included organization of meetings, travels, process payments, draft administrative documents, support procurement and recruitment processes, etc.

Communications Assistant implementation in the activities related to public communication and promotion of the project results, including project website and facebook updates, visibility items production, and support public events and campaigns.

Chemistry Expert supports the project implementation in the activities related to further development and implementation of national and regional monitoring programmes, introduction of novel methodologies, trainings, participation at the Joint Black Sea Surveys (JBSS) – sampling, processing and archiving of the results, including quality control of the filled-in Data Collection Templates, contributing to the relevant chapters of the Scientific Report.

Senior and Junior Biology Experts for Macrozoobenthos contribute to the implementation of JBSS 2019 regarding all aspects related to macrozoobenthos, including of sampling, analysis, preparation of relevant Data Collection Templates, intercomparisons, establishment of threshold values for macrozoobenthos and contributing to the relevant chapters of the scientific report.

e-DNA Expert supports the project in the activities related introduction of novel monitoring methodologies on e-DNA, antibiotic-resistance and microplastics bacterial degradation, participate at the JBSS and provide training to the national experts on e-DNA sampling and analysis, as well as provide relevant chapters to the scientific report.

Biology Expert for the Black Sea Savebook supports the upgrade of the Black Sea Save book including preparation of information set (detailed description, visualization, key elements for identification) of the 10 most common species in the black sea ecosystem. The expert contributes also to the development of public materials related to the biodiversity of the Black Sea, including preparation of on the Black Sea biodiversity, sentinels and environmental issues, which can be used at public awareness / educational events.

### Contracts for professional Services

Provision of a multipurpose Research Vessel for the Joint Black Sea Surveys. The tender for the Research Vessel for the Surveys 2019 has been launched for the period 11- 28 January 2019 and the contract has been signed with GeoEcoMar for the renting of the Research Vessel Mare Nigrum. The relevant administrative procedures were initiated in May 2017 to receive national permissions for the RV to operation in the national EEZ waters of Georgia and Ukraine. The permissions from both countries were obtained in a timely manner.

Provision of Analyses of Water Framework Directive Priority Substances and screening of Black Sea Specific Pollutants in water, biota and sediment samples obtained during the JBSS 2019. The tender for analyses has been launched for the period 24 June – 5 July 2019 and the contract has been signed with the National and Kapodistrian University of Athens, having analytical laboratory with relevant accreditations.

### Micropurchasing

For provision of low value services, micropurchasing has been organized: Production of Infographics (Cousteau Society), Rental of Large volume sampling and handling of environmental samples (AQ BIOS), shipment (Margrain).

Small scale services were provided by local suppliers for printing, audiovisual production and design and production of visibility items for the surveys and project campaigns.

### **Activity 4.4 Coordination activities with other relevant projects and institutions**

Coordination of the project activities with other relevant projects and initiatives is one of the key elements crosscutting with all project activities.

Well established contacts with the on-going or newly set up projects and initiatives (EUWI+, ANEMONE, ACCOBAMS, EC JRC plan to participate in the activities of EMBLAS-Plus in 2019) will help to avoid possible overlaps and fully use the potential synergies for effective and successful project implementation. The coordination of activities with the ICPDR, in particular parallel organization of the Joint Danube Survey 4 and the Joint Black Sea Surveys, with use of the same methodologies, facilitates comparability of obtained results and contributes to the assessment of the Black Sea.

### **Activity 4.5 Preparation of the regular donor reports**

After the Inception Workshop the Inception Report has been prepared, which also served as a detailed information on the project plans for the next period. An update on project activities was distributed in August 2019 to the Steering Committee members. The first progress report (the current document) was initially planned to cover the period from 5 March 2018 until 30 August 2019. However due to the fact that a number of activities were ongoing also in September – November and the first results & technical reports are currently being provided, the reporting period includes also additional period September November 2019.

### **Planned activities in the follow-up period**

Additional call for proposals is planned for “assessment and interpretation” of the information and data collected during EMBLAS-II and EMBLAS-Plus projects, including historical data.

The next Project Steering Committee Meeting is planned tentatively by the end of February 2020, most likely in a virtual format, to discuss the project work plan for 2020 and remaining project activities. It will be organized prior to a Technical Scientific Coordination Workshop, which is aimed to discuss the assessment of results of the EMBLAS-Plus project, summing-up of the overall findings of EMBLAS project and planning work for the preparation of the final Scientific Reports.

The Final Project meeting and the Steering Committee is tentatively scheduled at end of August / beginning of September 2020 (before the end of implementation period) to review the overall results of the project implementation.

**Overview on overall deliverables, expected results and indicators of achievements**

<b>Result 4:</b>				
<b>Activities</b>	<b>Deliverables overall / Deliverables partial</b>	<b>Month</b>	<b>Responsible</b>	<b>Status</b>
<b>Activity 4.1 Organizing the project coordination meetings and maintenance of the project Intranet</b>	<ul style="list-style-type: none"> <li>Inception workshop and Final project meeting back to back with the Steering Committee meetings;</li> <li>Two ad-hoc technical meetings.</li> </ul>			
<ul style="list-style-type: none"> <li>Organize the Inception Workshop, Final Meeting, SC meetings, and ad hoc technical events</li> <li>Prepare relevant background documentation (progress or scientific papers),</li> <li>Maintain the project Intranet, use it for info sharing</li> </ul>	Inception Workshop, 1 <sup>st</sup> SC meeting	Feb19	PMT	Inception Workshop and 1 <sup>st</sup> SCM organized
	2 <sup>nd</sup> SC meeting,	Feb20	PMT	Planned - virtual
	Technical workshop - coordination meeting	March 2020		planned
	Final SC meeting	Aug/Sept 2020		
<b>Activity 4.2 Organizing at least two rounds of Calls for Proposals</b>	<ul style="list-style-type: none"> <li><i>*Technical documentation for the calls prepared*</i></li> <li><i>*Calls launched, evaluated, contracts awarded</i></li> <li><i>*Reports on grants implementation</i></li> </ul>			
	<ul style="list-style-type: none"> <li>Technical documentation for the Calls for Proposals;</li> <li>Calls for Proposals launched and conducted;</li> </ul>	Mar 2019 Aug 2019	Project team	3 rounds of calls launched
	<ul style="list-style-type: none"> <li>Indicatively 20 contracts awarded and successfully implemented;</li> </ul>	Sept/Oct 2019	Project team	5 Letters of Agreement 6 small value grants
	<ul style="list-style-type: none"> <li>Reports on grant implementation under the Calls for Proposals and a summary of results achieved – as a part of the Progress and Final Reports.</li> </ul>	Aug 2020	Project team	
<b>Activity 4.3 Organizing procurement, recruitment and calls for proposals</b>	NA			
<ul style="list-style-type: none"> <li>Prepare the ToRs for consultants, services, CFPs based on the DoA, Inception report &amp; Workplan;</li> <li>Advertising, evaluation and contract awarding in line with the UNDP Rules and Procedures;</li> <li>Follow-up on the delivered results and ensuring the required quality.</li> </ul>	ToRs /recruitment of short-term experts on chemistry, biology.... Procurement - Research Vessel - analytical works / passive sampling / eDNA analyses	Mar 2018-Mar 2020	Project team	ongoing

<b>Result 4:</b>				
<b>Activities</b>	<b>Deliverables overall / Deliverables partial</b>	<b>Month</b>	<b>Responsible</b>	<b>Status</b>
<b>Activity 4.4 Coordination activities with other relevant projects and institutions</b>	<ul style="list-style-type: none"> <li>• Project presentations at relevant international events;</li> <li>• Coordination with the relevant projects.</li> </ul>			
		ongoing	PMT	Presentations at 4 natl. events and 6 intl./ regional events Cooperation with 4 projects
<b>Activity 4.5 Preparation of the regular donor reports</b>	<ul style="list-style-type: none"> <li>• Inception Report, Annual and Final Reports;</li> <li>• Quarterly updates of up to two pages;</li> <li>• Provision of information upon request, including as part of eventual Result Oriented Monitoring of the Project;</li> <li>• Summary progress reports for the Steering Committee.</li> </ul>			
Prepare relevant reporting in line with the donor requirements and to the SC members (i.e. Inception Report, Annual Progress and Final Report, independent UNDP Terminal Evaluation)	<ul style="list-style-type: none"> <li>• Inception Report, Annual and Final Reports;</li> <li>• Quarterly updates of up to two pages;</li> <li>• Provision of information upon request, including as part of eventual Result Oriented Monitoring of the Project;</li> <li>• Summary progress reports for the Steering Committee.</li> </ul>	Mar 2019 quarterly	PMT	Inception Report (Jan-Apr 2019) Update August 2019 Progress report due

*\*\* additional deliverable as per fine-tuning of the project work plan suggested during the Inception Workshop*

### 3. Emerging Challenges and Measures Taken

During the reporting period the project needed to address three major issues: administrative, political and financial. The administrative challenge was related to the postponed start of the full-scale implementation of project activities due to the contractual negotiation of the Delegation Agreement between EC and UNDP, that was taking longer than expected. . EC DG NEAR and UNDP agreed on the retroactive project start (5 March 2018) and therefore it was possible to keep links between EMBLAS-II and current project phase through continuation of relevant activities (e.g. work on the databases) and preparatory works necessary for the full-scale project implementation.

Political challenge is related to the results of elections in Ukraine and change of the overall political situation in the country. A new ministry for the Ministry of Energy and Environmental Protection has been created on 29 August 2019, which have merged MENR and Ministry of Energy and Fuel. The new minister has been appointed in summer 2019 and at the moment not all posts are nominated. It is expected, that there might be some changes in the prioritization of activities linked with the EU Association Agreement. In coordination with EU Delegation and UNDP Ukraine, it will be necessary to establish contacts with newly appointed representatives of the ministry, which will be represented in the project Steering Committee and provide necessary information about the project.

The financial challenge relates to the potential negative impact of EUR/USD exchange rate on the project budget remains a serious issue and it is monitored by the Project Management Team. The planning of the remaining activities until the end of the project implementation period (5 September 2020) will need to take into account potential loss of operational budget by \$25,000 (considering the UN Operational Rates of Exchange<sup>16</sup> as of December 2019). It will be necessary to carefully review the plans for the remaining project activities and respective planned budget allocations. Some limitations may be needed, e.g. for the organization of events, travels. Proper planning of the project activities will make sure that the overall planned results of the project will not be changed.

So far, there was no need to introduce any major changes in the project implementation and the project is progressing as planned.

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<sup>16</sup> <https://treasury.un.org/operationalrates/OperationalRates.php>



## 4. Time Schedule

### 4.1 Workplan 2018-2020

Action Plan	2018				2019				2020				key milestones
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	Y1				Y2				Y3				
Activity/ Month	1-3	4-6	7-9	10-12	13-15	16-18	19-21	22-24	25-27	28-30			
<b>Result 1: National and joint regional monitoring programmes implemented</b>													
1.1 Implementation of the national monitoring programmes in accordance with reporting obligations under the MSFD, WFD and BSIMAP						x	x		x	x			JBSS-NMS; DCTs completed; Technical Reports, Scientific reports
1.2 Implementation of regional monitoring programmes compliant with BSIMAP - Joint Black Sea Survey						x	x		x	x			JBSS-JOSS; DCTs completed; Technical/scientific reports
1.3 Facilitate sharing of environmental monitoring data at the regional & European level			x				x				x		BS WQD - new modules; Providing data from BS Surveys;
1.4 Capacity building on novel monitoring methods, QA/QC, BS WQD use						x	x						Novel SOPs; Trainings
1.5 Support countries to comply with obligations under the Bucharest Convention & EU AA									x				National & regional monitoring programs
<b>Result 2: Monitoring and reduction of marine litter facilitated</b>													
2.1 Collect marine/river/beach litter and microplastics pollution monitoring data regularly													
2.2 Organize campaigns on marine litter & good waste management, focus on plastic waste					x	x	x						Educational presentations/ campaigns
2.3 Provide assistance to the local communities/authorities							x		x				Pilot actions
<b>Result 3: Environmental public awareness and educational campaigns conducted</b>													
3.1 Organization of educational / public awareness events, linked also to monitoring cruises and "Black Sea SaveBook" mobile phone application							x	x		x			Black Sea SaveBook re-launch
3.2 Organizing "Black Sea Clean Beach Day"						x				x			BS Clean Beach Day/ Black Sea Day
3.3 Further dissemination of the project results					x	x		x		x			Press conferences, promo items (links with surveys, campaigns, movies)
<b>Result 4: Management and coordination of the project</b>													
4.1 Organizing Project Coordination meetings (Inception, SC meetings, ad-hoc technical)				x	x			x	x		x		Inception Wshp, Steering Committee, Coordination meeting, Final meeting
4.2 Preparation of regular donor reports and reporting to the SC members				x	x	x							Call for partners and call for proposals
4.3 Organizing procurement, recruitment and calls for proposals													
4.4 Coordination activities with other relevant projects and institutions													
4.5 Preparation of regular donor reports						x					x		Annual progress report, Final report

## 4.2 Schedule of project events March 2018 - September 2020

Event title	Location / Date	Planned Participants / target group	Objective of the event
Press tour for journalists “Support to the EU Delegation to Ukraine with media related activities”	24 April 2019 Odesa (UA)-	Journalists, Ukraine	<ul style="list-style-type: none"> <li>• Share information about the project and to create permanent interest to follow the project achievements</li> </ul>
Public campaign “Sort Plastic- Save the Sea”, Ukraine	April – June 2019, country wide (UA)	School kids	<ul style="list-style-type: none"> <li>• Learn how to sort the plastic</li> <li>• Promote the facts of plastic pollution of the Sea</li> <li>• Support practical reduction of plastic at the beaches.</li> </ul>
ANEMONE/EMBLAS Workshop on tools and indicators for integrated assessment of the Black Sea environmental status	18-19 June 2019, Istanbul	National Expert RO/BG/TR/GE UA/RF	<ul style="list-style-type: none"> <li>• Discuss tools and indicators for integrate assessment of the Black Sea environmental status – eutrophication and contaminants, as well as MSDF requirement</li> </ul>
Joint Danube surveys / trip to 0 km	29 June Danube delta (UA)	Journalists, water managers	<ul style="list-style-type: none"> <li>• Create link between the Joint Danube Surveys and Joint Black Sea Surveys</li> <li>• Raise awareness on the input of Danube into the Black Sea in terms of pollution</li> <li>• Inform about sentinels concept and restoration of the Angel’s wings population in the Danube delta</li> </ul>
Marine litter and microplastics workshop	26 July, Constanta (RO)	National experts	<ul style="list-style-type: none"> <li>• Discuss methodologies on Marine floating / beach / riverine litter and microplastics monitoring and practical examples of work</li> </ul>
Press-conference “Our Black Sea: new monitoring results for decisions”, Ukraine	29 July, Odesa (UA)	Journalists, decision-makers, marine specialists	<ul style="list-style-type: none"> <li>• Inform public on the results of Joint Black Sea surveys and EU support provided</li> <li>• Create a ground for better state marine monitoring</li> <li>• Create media interest to the issues of the Black Sea</li> </ul>
Joint Black Sea surveys	26 July – 7 August Black Sea	National experts	<ul style="list-style-type: none"> <li>• Marine monitoring by different methods</li> </ul>
Press-conference “Our Black Sea: new monitoring results for decisions”, Georgia	5 August, Batumi (GE)	Water managers, media	<ul style="list-style-type: none"> <li>• Inform public on the results of Joint Black Sea surveys and EU support provided</li> <li>• Create a ground for better state marine monitoring</li> </ul>
Information session for EU institutions and Member States	23 September, Brussels (BE)	EC DG NEAR / MARE/ Environment, EC JRC, EEA	<ul style="list-style-type: none"> <li>• Inform about the project results</li> <li>• Discuss the further synergy with other EU funded initiatives</li> </ul>

<b>Event title</b>	<b>Location / Date</b>	<b>Planned Participants / target group</b>	<b>Objective of the event</b>
Campaign “I cleaned – Your Turn 2: changing our future together” #EUBeachCleanup	16-30 September (UA)	Schools, NGOs	<ul style="list-style-type: none"> <li>• Arranging of coastal clean up around the country</li> <li>• Informing about the trends in marine litter pollution</li> <li>• Removing waste from nature</li> </ul>
Coastal clean-up, Ukraine in frame of #EUBeachCleanup	20 September, Mykolaiv Oblast (UA)	School children	<ul style="list-style-type: none"> <li>• Arranging coastal clean ups</li> <li>• Raising people’s awareness about the Black Sea problems</li> </ul>
Exhibition of Cousteau infographics in TSU	30 September, Tbilisi (GE)	Students	<ul style="list-style-type: none"> <li>• Raising people’s awareness about the Black Sea problems</li> <li>• Inform about the project results</li> </ul>
School for ecojournalists	9 October, Odesa (UA)	Regional journalists	<ul style="list-style-type: none"> <li>• Raising regional media awareness about the Black Sea</li> <li>• Promotion project results</li> </ul>
Black Sea Action Day Georgia	October 31, 2019 Poti, Georgia	governmental and private agencies, scientific and public education institutions, NGOs	<ul style="list-style-type: none"> <li>• Raising people’s awareness about the Black Sea problems</li> <li>• Scientific workshop dedicated to the International Black Sea Action Day on 31 October</li> </ul>
Black Sea Day, Russian Federation	27-31 October, Sochi (RF)	School children	<ul style="list-style-type: none"> <li>• Arranging coastal clean ups</li> <li>• Raising people’s awareness about the Black Sea problems</li> </ul>
Facebook challenge “Greet the Black Sea”	20-31 October (UA) nationwide	School children	<ul style="list-style-type: none"> <li>• Create emotional connection to the Black Sea</li> <li>• Promote the Black Sea Day</li> </ul>
Training on Passive Sampling	18-19 November 2019, Gelendzhik (RF)	National Chemistry Experts	<ul style="list-style-type: none"> <li>• Discuss passive sampling methodology, practical use and preparation for analyses of passive samplers</li> </ul>
EMBLAS presentation	12 November 2019, Mykolaiv (UA)	Geography teachers, university teachers	<ul style="list-style-type: none"> <li>• Raising regional media awareness about the Black Sea</li> <li>• Promotion project results</li> </ul>
EMBLAS presentation	14 November 2019, Kherson (UA)	Students and school children, NGO	<ul style="list-style-type: none"> <li>• Raising regional media awareness about the Black Sea</li> <li>• Promotion project results</li> <li>• Discussing of the pilot project implementation</li> </ul>

## 5. Cooperation with other partners and projects

Experience from the previous phase of the project confirms the importance of cooperation with other initiatives, projects and institutions at international level to achieve high quality results, reinforce the impact of the project and increase efficiency in use of the project resources.

Cooperation with EC Joint Research Centre has been established already in 2016 regarding the marine litter monitoring and special chemicals analyses of samples collected during the surveys and continued also in 2017 and 2019 Surveys. It needs to be noted that EC JRC is providing analyses and trainings and guidance free of charge for the project and thus significantly contributing the high value of the scientific results. The project is also supported by the Norwegian Institute for Water (NIVA), which contributing with trainings and technical assistance at analysis of microplastics in sea water and passive sampling. In addition, German Federal Environmental Agency is contributing in-kind with analysis of microplastics in sediments. EMBLAS-Plus cooperates with the ANEMONE project, funded under the 1<sup>st</sup> Call for CBC within the Joint BS Operational Program for 2014-2020. Thematically, there is an overlap of the EMBLAS-Plus and ANEMONE activities. ANEMONE covers in addition to Ukraine also Romania, Bulgaria and Turkey, while EMBLAS-Plus covers waters of Ukraine, Georgia and Russian Federation.

A close cooperation between ANEMONE and EMBLAS will facilitate assessment of the status of all the Black Sea coastal countries in a harmonised way. UkrSCES is a project partner in both projects and will ensure coordination of activities in Ukraine, as well as across both projects. It has also a leading role in the development and management of the BS Water Quality Database and thus will be responsible for collection and storage of all data from projects' surveys using harmonised approaches. The areas of cooperation include preparation of the Regional Monitoring Network (BSIMAP compliant) for all BS countries, preparation of thematic reports based on the survey results of EMBLAS-Plus and ANEMONE, participation of experts from both projects at common workshops and trainings, cooperation at the preparation of Joint document - Black Sea Monitoring and Assessment Guidelines, development of the list of BS Specific Pollutants, further development and population of the BS WQD. Cooperation with the ACCOBAMS project CeNoBS ("Support MSFD implementation in the Black Sea through establishing a regional monitoring system of cetaceans (D1) and noise monitoring (D11) for achieving GES" <http://www.accobams.org/main-activites/cenobs-project>) has been agreed during the EMBLAS-Plus Inception Workshop. EMBLAS project included cetacean survey in Russian Federation into the project work program and thus facilitate a unique collection of the cetacean data for the whole Black Sea. The collected data from the monitoring will be included in the Black Sea water Quality database in the required format of DCTs.

The project has also links with the ICPDR (International Commission for the Protection of the Danube River Basin), since the scientific programme of the Joint Black Sea Survey 2019 and Joint Danube Survey 4 (organized by the ICPDR) are harmonised and using the same novel methodologies, such as environmental-DNA and non-target screening of chemical pollutants as well as microplastics monitoring. Coordination of both surveys facilitate obtaining unique data for assessing the impact of the Danube on the environmental status of the Black Sea, as well as strengthen the cooperation between the ICPDR and the Black Sea Commission.

EUWI+ project and EMBLAS are coordinating their activities, it has been agreed to cooperate within the national pilot monitoring studies in Georgia, as well as the beach clean-up campaign "I cleaned – Your Turn 2: changing future together". EMBLAS-Plus has developed the animated cartoon, supported bags production and distribution for coastal clean-up and EUWI+ supported riverine clean ups.

EMBLAS is cooperating with projects: MARLITTER "Improved online public access to environmental monitoring data and data tools for the Black Sea Basin supporting cooperation in the reduction of marine litter"; Waste Free Rivers for a Clean Black Sea project and RedMarLitter, which are funded under the 1st Call for CBC within the Joint BS Operational Program for 2014-2020.

The project is also partnering with other EU funded projects and initiatives, such as EMODnet, SeaDataNet, WISE-Marine, IPChEM and new data from the Joint Black Sea Surveys 2019 will be shared.

## 6. Visibility actions

During the project implementation a number of communication tools were used to strengthen the project visibility and to reach relevant target audiences.

### Website and social networks

The project website [www.emblasproject.org](http://www.emblasproject.org), created in the first EMBLAS project phase is regularly updated with information on the project activities and events (nr. of visitors in November 2019: 13,374/ nr. of views 32,400 (previous count in November 2018: 6,836 visitors, 17,850 views)).

The facebook group “Fans of the Black Sea” has been established in September 2016. The community members are regularly publishing posts related to the project activities, as well as various issues and stories related to the Black Sea environment (membership 1,008 as of November 2019, previous count in November 2018: 502 members).



<https://www.facebook.com/groups/1660089820968698>

### Publications and audio-visual productions

The project prepared 6 infographics – Posters (versions in English, Georgian, Russian, Ukrainian, <http://emblasproject.org/visibility>), which are used to communicate the project findings and the Black Sea environment issues during the various public events.

Two promotional cartoon movies on marine litter and plastics were prepared for the above-mentioned campaign to illustrate better the objectives and expected results from the activities:

- For the campaign “Sort the Plastic – Save the Sea” on Plasticchew Ozzi <https://youtu.be/1WOrPvCeSLE>
- For the campaign “I cleaned – it’s your turn 2: changing future together” <https://youtu.be/kzTY5SBR28s>



Exhibition of infographics in Batumi

### Promotional items

In order to promote the project and particularly the **Joint Black Sea Surveys, specific visibility items** were prepared: banner, T-shirts, caps, bags marked with the logos of surveys, EMBLAS, EC and UNDP.

For Black Sea clean-up campaigns eco-bags were prepared and distributed to the participants of the campaigns as a present for their active participation. For the campaign “Sort Plastic – Save the Sea” the Black Sea puzzles from recycled plastic were produced (they became very popular with the kids and NGOs) as well as key chain with EMBLAS logo from recycled plastic. They were distributed to the schools, which were participating in the campaign



Visibility items for JBSS

and sent the collected HDPE plastic waste for recycling. All certificates were developed with the respect to the visibility rules.

### Public events and campaigns

The project organized directly one Marine litter prevention campaign “Sort Plastic – Save the Sea” in Ukraine (to be replicated in Georgia) and co-organized the campaign “2019 #EUBeachCleanup! - global initiative, in Ukraine under motto “I cleaned – Your Turn 2: Changing the Future Together”, jointly with EUWI+ Project.

At the occasion of the Joint Black Sea Survey two press conferences were organized in Odessa (29. July 2019) and Batumi (5 August 2019), where the EMBLAS-Plus project was presented and gained a lot of media attention (more than 120 media links) in Ukraine and 16 media links in Georgia. Both events were consulted with the communication teams of EU Delegations and UNDP Country offices in Ukraine and Georgia.

The project has been promoted at the press-conference during the celebration of the Danube Day in Ukraine (29 June 2019) and launch of the Joint Danube Survey 4.

A number of events were organized for the Black Sea Day 2019 in Georgia, Russian Federation and Ukraine, where the project has been presented and relevant promo items distributed.



Interview to the Mykolaiv TV channel, at the occasion of the Black Sea Day 2019

### Project presentation at other events

As already mentioned in the Chapter 2.3, under Activity 3.3. “Dissemination of project results and visibility”, the project has been presented in a number of national and international events. Those included meetings of the Black Sea Commission and its Advisory Groups, events with participation of Ukrainian media organized by EU Delegation and UNDP, as well as events organized by ACCOBAMS CeNoBS project, ANEMONE, EUWI+ and ICBS.



International High-level Conference “Inter-basin Cooperation on Marine Litter: a focus on the Danube River and the Black Sea” (4 April 2019, Sofia)

## 7. Overview of results/targets/achievements as per the logframe

Results	Indicators	Planned Target	Achieved Target	Source of verification
<b>Impact: To improve the level of protection of the Black Sea environment</b>				
<b>Impact 1</b> Improved availability & sharing of marine env. data from the natl. and joint reg. monit. programmes aligned with the MSFD, WFD, BSIMAP	Harmonised (MSFD / WFD BSC) monitoring programs in place in UA/GE/RF Capacities of the countries to implement monitoring programs enhanced	<b>2019:</b> National monitoring programs adopted in UA/GE/RF; 30 national experts trained / 50% women <b>2019 /2020:</b> 3 natl. and 1 joint monitoring surveys organized, Data uploaded in the BS WQD, BSIMAP, intl. marine data platforms	Joint Black Sea Surveys organized: JOSS UA/GE JOSS RF 2 NMS (RF/UA)	Revised national and regional programs Data (including marine litter) in intl. marine data platforms and BSIMAP Campaigns and actions / measures documented Statistics on participation (individuals /institutions)
<b>Impact 2</b> Introduced joint actions to monitor and to support reduction of the river, marine and beach litter	Joint actions /measures for marine litter (ML) reduction implemented in UA/GE/RF	<b>2019/2020:</b> 4+ Campaigns/actions for ML reduction (min 2 in GE and UA), min. 50 pers., 3 institutions per country;	1 campaign in UA: “Sort Plastics – Save the Sea” “ Campaigns in GE/RF scheduled	
<b>Impact 3</b> Increased public involvement in the protection of the Black Sea and raised awareness on the key environmental issues	Events and small pilot actions organized to increase awareness and involvement of public, stakeholders in the Black Sea protection	<b>2019/ (possibly 2020):</b> BS Clean Beach day organized UA/GE/RF (one per country at least), 100 people per country involved 3 Pilot actions (one per country) aimed at biodiversity protection or organic pollution reduction	1 campaign for the “BS Clean Beach Day”: #EUBeachCleanup! In UA, planned in GE 6 small value grants awarded – beach clean-up, recycling, nature restoration	

JBSS – Joint Black Sea Surveys / JOSS – Joint Open Sea Survey / NMS – National Monitoring Surveys

Results	Indicators	Planned Target	Achieved Target	Source of verification
<b>Outcome 1: Result 1. National and joint regional monitoring programs implemented</b>				
	1. Harmonized monitoring programs (compliant with EU MSFD, WFD, Bucharest Convention) endorsed, 2. Data collected by the project for 2017-2018-2019 uploaded to the BS WQD, BSIMAP	<b>2018/2019:</b> Natl. & reg. monitoring programs endorsed UA/GE/RF; 30 natl. experts trained / 50% women <b>2019/2020:</b> 3 natl., 1 reg. monit. surveys implemented, data uploaded in the BS WQD, BSIMAP, intl. marine data sharing platforms	3 workshops/trainings organized: Marine Litter & microplastics, Passive Sampling, Europication & contaminants), xxx experts participating...	Revised natl. & reg. monitoring programs Data available (including ML) under international marine data sharing platforms and BSIMAP
Output 1.1/1.2 Revised national and regional monitoring programmes prepared / implemented				
	1.1.1/1.2.1 Nr. of manuals/SOPs available	<b>2019:</b> NPMS Manual, incl. novel method, 3 new SOPs, DCTs <b>2019/2020:</b> DCTs, Survey Reports,	Manuals for Joint Black Sea Surveys – Regional and National Technical Reports from the Surveys	Manuals and Reports from the monitoring cruises, DCTs completed Proposals for WFD-MSFD compliant national and regional monitoring
	1.1.2/1.2.2 Nr. of natl./reg. surveys	<b>2019:</b> 3 natl., 1 reg. monit. Surveys	2 NMS and 1 regional survey conducted	
	1.1.3 /1.2.3 Nr. of participating institutions in surveys	7natl., 2 intl. institutions,	6 national institutions (2 GE: NEA/TSU, 2 RF: SOI, SIO-RAS, 2 UA: UkrSCES, IMB), 2 intl. institutions (JRC, UoA) involved	
	1.1.4/1.2.4 Nr. of experts participating in the surveys, manuals, DCTs work (men/women)	20 experts (10 women)	60 experts participating in surveys (field work), 34 M / 26 W	
Output 1.3 Data and information shared on the Black Sea environment				
	1.3.1 BS WQD further development with additional modules, functionalities, data	<b>2019:</b> at least 2 additional modules in BS WQD, historical data at least from 2 relevant projects collected	DB module for fish and marine mammals developed	BSIMAP document Minutes of the BSC AG meetings Functional BS WQD Black Sea data in other marine data platforms (e.g. EMOdnet, SeaDataNetm, WISE-Marine, IPCHEM)
	1.3.2 Nr. of marine data platforms provided with the Black Sea data	<b>2019/2020:</b> Data in 3 int. marine platforms;	info available by the end of project	
	1.3.3 Nr. of natl. institutions, experts using BS WQD (men/women)	7 natl. institutions, 28 experts (14 women)	info available by the end of project	
	1.3.4 Nr. of institutions cooperating in data sharing & info exchanges	7 natl., 2 intl. institutions.	info available by the end of project	



Results	Indicators	Planned Target	Achieved Target	Source of verification
<b>Outcome 1: Result 1. National and joint regional monitoring programs implemented</b>				
Output 1.4 Strengthened capacities of the natl. institutions in the field of environmental monitoring (incl. ISO 17025 standard & use of the BS WQD)				
	1.4.1 Nr. of training topics covered	<b>2019 /2020:</b> Trainings – 3 topics (novel methodologies, BS WQD use, classification schemes)	2 training organized: Marine Litter and microplastics, e-DNA sampling, passive sampling	<b>Trainings</b> materials / agenda / List of participants <b>Participation of experts</b> in the surveys, individual study visits, intl. events <b>BS WQD Manual</b> available
	1.4.2 Nr. of experts trained (men/women)	70 experts trained (35 women),	46 experts (13M/33 W)	
	1.4.3 Nr. of experts participating in exchanges / visits of laboratories / scientific events (men/women)	10 experts (5 women) in exchanges	2 experts (1M/1W)	
Output 1.5 Countries supported in the activities related to compliance with obligations under intl. legislation and conventions				
	1.5.1 Nr. of topics/issues covered	<b>2019:</b> Parts of Initial Assessment for GE, UA	info available by the end of project	Draft documents of selected parts of Initial Assessment Organized workshop - agreed list of BS SWMIs, BS relevant pressures and inclusion of BSSPs into BSIMAP
	1.5.2 Nr. of documents accepted by the countries, (with project support)	<b>2019 / 2020:</b> List of BSSPs, List of SWMI	info available by the end of project	

Results	Indicators	Planned Target	Achieved Target	Source of verification
<b>Outcome 2 / Result 2.</b> Joint monitoring and reduction of marine litter				
	2. Data on ML collected and joint actions /measures for marine litter reduction proposed and implemented in each country	<b>2018/2019:</b> Data on ML collected and analysed in 3 countries; 4+ Targeted campaigns / actions for marine litter reduction organized (min. two in GE and UA)	Data on ML litter collected – floating litter – JOSS in all three countries, beach litter – GE /UA/RF	Data on microplastics ML/ available, shared Campaigns/actions/ measures documented; Grants awarded
Output 2.1: Data and information on marine litter available				
	2.1.1 ML / microplastics data available in BS WQD and other marine data platforms	<b>2019:</b> DB module (ML/microplastics)	2 campaigns at two different topics in Ukraine: “Sort Plastic – Save the Sea” and “I cleaned – Its your turn 2: changing future together”	Data module for marine and riverine litter in the BS WQD, Analytical report on ML and microplastics
	2.1.2 Analytical reports available	<b>2019/2020</b> Data collected from natl. and reg. surveys in each country Data in the BS WQD, analysed	Only in Ukraine the nr of participants: “Sort the Plastic”- 5,851 person; “I cleaned – Your turn – more than 7,000 (jointly with EUWI+). More than 50% (around 64%) of participants were women (teachers and school girls).	
Output 2.2: Awareness on ML / microplastics issues, good waste management practices introduced				
	2.2.1 Nr. and topics of campaigns	<b>2019/2020:</b> 2 topics covered by enviro campaigns (good waste management – focus on plastics), 4+ campaigns (min. 2 in GE and UA),	Topics of campaigns: recycling of plastics and clean-ups	Campaigns documented / Statistics
	2.2.2 Nr. of participants targeted by the campaigns /men, women, young	1000 persons targeted (500 women)	info available by the end of project	
Output 2.3: Local authorities assisted with marine litter reduction measures				
	2.3.1 Nr. of organizations/institutions involved in the proposed measures	<b>2019/2020:</b> 9 instit. involved (3 per country)	Min 6 (as far as 6 pilot projects are awarded)	Pilot activities documented Beach clean-up statistics
	2.3.2 Nr. of small scale pilot activities organized	<b>2019:</b> 6 Proposals for pilots/ assisting the local municipalities (3 per country estimated) <b>2019 / 2020:</b> 4+ Small pilots for ML reduction (min. 2 in GE and UA)	6 small low value grants awarded	

Results	Indicators	Planned Target	Achieved Target	Source of verification
<b>Outcome 3 / Result 3.</b> Environmental public awareness and educational campaigns conducted				
	3. Events /pilot actions organized to increase awareness and involvement of public, stakeholders in the Black Sea protection	<b>2019:</b> 3 BS Clean Beach Day events (one per country); <b>2019 /2020:</b> Press conferences / events organized with the Joint Black Sea Surveys	2 press-conferences organized related to JBSS, Contributing 1 press-conf to the Danube Day in Ukraine Clean Beach Day: UA: 1 informational campaign and 1 event with actual clean up (in total more than 7,000 people involved) GE: clean up in Poti with more than 200 people RF: cleaning the beach in Sochi using the Marine Litter Watch application (52 people)	Campaigns documented Grants awarded Statistics
Output 3.1: Increase public awareness on the Black Sea environmental issues, environmental monitoring (“Black Sea SaveBook”) and Joint Black Sea Surveys				
	3.1.1 Nr. of events and press conferences organized with JBSS	2 press conf organized in GE and UA (at the start of the surveys and for the presentation of results)	2 press-conferences organized with JBSS – Georgia and Ukraine	Website posts on events Promo items available Education / campaign materials Media overview, Press releases and media invites Educational publications available
	3.1.2 Nr. of institutions promoting / trained in use of the BSSB	9 institutions involved	Shifted to spring 2020	
	3.1.3 Nr. of users BSSB (men/women)	1000 users of BS Save Book application (500 women),	Shifted to spring 2020	
	3.1.4 Nr. of collected data inputs (protocols)	additional 1000 data protocols	Shifted to spring 2020	
	3.1.5 Nr. of actions addressing participation of women in env. protection*	3 actions / events for women’s participation	Shifted to spring 2020	
Output 3.2: Involving CSO / NGOs and scientific / education institutions in the awareness campaigns – the BS Clean Beach Day, and other actions.				
	3.2.1 Nr. of public events (BS Day, sentinels training, etc.),	<b>2019/2020:</b> 3 Black Sea Clean Beach Day event, one per country	Black Sea Day UA: Facebook challenge “Greet the Black Sea with its “birthday” – 14 video stories + 2 regional meetings – presentations of project results GE: exhibition of the Cousteau infographics and scientific conference RU: 3 events (Ecological competition of creative works among Sochi schoolchildren	Website posts on events Promo items available Education / campaign materials Media overview, Press releases and media invites Educational publications available

Results	Indicators	Planned Target	Achieved Target	Source of verification
<b>Outcome 3 / Result 3.</b> Environmental public awareness and educational campaigns conducted				
			"We are for the clean seas", workshop on ecobags and establishment of museum of marine litter)	
	3.2.2 Nr. of topics dealt by campaigns, nr. of campaigns	2 topics covered by enviro campaigns (nature conservation and pollution prevention), 3 campaigns (1 per country)	UA: two campaigns – on sorting the plastic and prevention marine litter pollution RF: one campaign "We are for the clean seas" GE: shifted to spring 2020	
	3.2.3 Nr. of institutions active	9 institutions involved (3 per country),	More than 50 organizations involved	
	3.2.4 Nr. of participants (men, women)	50 participants per event/ 50% women	The total number of participants around 14,300	
<b>Output 3.3:</b> Information on the project results disseminated, project visibility enhanced				
	3.3.1 Nr. of publications, audio-visual products	<b>2019/2020:</b> 1 Short movie, 1 Touring and 1 Holographic presentation on ML, 2 Infographics on the Black Sea; 1 Brochure on MSFD, 1 brochure on scientific results of the survey	6 Infographics: Hypoxia, Contaminants, Marine Litter, Marine Mammals, biodiversity and General on the Black Sea Infographics presented at project events (3x – GE/RF/UA) and other events (>3x)	Media overview, Press releases and media invites Educational publications available Concrete measures introduced Audio-visual productions
	3.3.2 Nr. of posts at the project website and BS fans facebook page, number of subscribers of facebook page	additional 60 posts on website, 1000 website visitors, 150 subscribers/	Website visitors: 13,374 (increased by more than 6,500 in one year) Facebook subscribers:1,008 (increased by 506)	Brochures / Public summaries on the project results Statistics
	3.3.3 Nr. of press conferences	3 press conferences with surveys, results dissemination	2 press conference with JBSS (Ukraine and Georgia in July-August 2019), 1 press-conf participated (with ICPDR), At last one press-conf planned for summer 2020	

\*new indicator introduced as per the Inception Report

Results	Indicators	Planned Target	Achieved Target	Source of verification
	<b>Outcome 4: Result 4.</b> Management and coordination of the project ensured			
	4.1 Project coordination meetings organized	2 Steering Committee meetings Inception and Final workshop	Inception Workshop and the 1 <sup>st</sup> SC meeting in Feb 2019 2 <sup>nd</sup> SC meeting scheduled for Feb 2020	Meeting minutes, Agenda, List of participants
	4.2 Two rounds of calls for proposals, procurement and recruitment	2 rounds of calls at least, launched by end August 2019 At least 20 contracts awarded	3 rounds of Calls launched, 5 letters of agreements and 6 low value grant contracts signed	Documentation, reports from the pilot projects implementation
	4.3 coordination with other projects	At least 3 other projects cooperating (EUWI+, ANEMONE, ACCOBAMS)	Cooperation with EUWI+, ANEMONE, ACCOBAMS, MarLitter, ICPDR	Joint events, actions documented
	4.4 Regular reporting to SC and Donor	Short quarterly reports (2 pagers), Summary for the SC meeting Donor reports - Sept 2019; Feb 2021 (Final Report approved by the donor)		reports

**Definitions:** “Impact” means the primary and secondary, long term effects produced by the Action. “Outcome” means the likely or achieved short-term and medium-term effects of an Action’s outputs. “Output” means the products, capital goods and services which result from an Action’s activities. “Indicator” is the quantitative and/or qualitative factor or variable that provides a simple and reliable means to measure the achievement of the Results of an Action. “Baseline” means the starting point or current value of the indicators. “Target” (or results Goal) means the quantitatively or qualitatively measurable level of expected output, outcome or impact of an Action. A “logical framework matrix” (or “logframe matrix”) is a matrix in which results, assumptions, indicators, targets, baselines, and sources of verification related to an action are presented.

The intervention logic tells how, in a given context, the activities will lead to the outputs, the outputs to the outcome(s) and the outcome(s) to the expected impact. The most significant assumptions developed in this thinking process are to be included in the logframe matrix.