



Coordination Meeting

EU- UNDP Project: "Improving Environmental Monitoring in the Black Sea"

*Empowered lives.
Resilient nations.*

Batumi, 22-23 May 2014

Report

Day 1, Morning Session, 22 May 2014, 09.30-13.30

Chair: Vladimir Mamaev (UNDP-BRC)

Morning session was opened by the Chair Mr Vladimir Mamaev who welcomed all participants, shortly introduced himself to the audience and offered to all participants to briefly introduce themselves as well by name, title, place of work, country. There were participants from UNDP BRC (Vladimir Mamaev, Violeta Velikova, Marcela Fabianova), Black Sea Commission (Irina Makarenko), NEA Tbilisi (Marine Arabidze), NEA Batumi (Mari Khalvashi, Ciuri Gvarishvili, Dodo Zhgenti, Rezo Goradze, Eteri Mikashavidze), OB-IBSS (Borys Aleksandrov), TSU (Nino Machitadze, Vakhtang Gvakharia), UNDP Ukraine (Sergey Volkov, Vasiliy Kostiusyn, Lilia Spasova), SIO-RAS (Tamara Shiganova, Aleksander Mikaelian, Valeriy Chasovnikov), IBSS (Aleksandr Boltachev), UkrSCES (Nikolay Berlinskiy, Richard Lisovskyi, Yurii Denga), SOI (Aleksandr Korshenko, Ali Alyautdinov), MHI (Sergey Konovalov, Oleksiy Khaliulin), OSU (Olga Konareva).

Mr Vladimir Mamaev shortly introduced the purpose of the meeting and asked about opinions/comments regarding the Agenda of the meeting.

Mr Aleksander Mikaelian mentioned the absence of the Presenter (p.9 of the Agenda).

Mr Aleksandr Boltachev assured he would give this presentation instead of Mrs O. Sergeyeva who could not attend the meeting on personal reasons.

Mrs Violeta Velikova remarked that the presentation of Mr Borys Aleksandrov will be delivered according to the Agenda but will be changed a bit in focus due to the postponed Biological Workshop which could not have been conducted in Odessa in 12-15 May 2014.

Mr Vasiliy Kostiusyn stressed that Biological Workshop have been cancelled due to the unstable political situation in Ukraine but new dates and place will be soon announced.

Mr Vladimir Mamaev agreed that the purpose of this meeting was not a discussion about political changes in the world, but the discussion about monitoring of the Black Sea and the state of ecosystem as a whole. In this view, all aspects of work during presentations are to be shown - the positive and the negative as well. It will help to implement both projects EMBLAS 1 and EMBLAS 2 further streamlining the work.

1. Activities, achievements, gaps in the 1st year of the project implementation (presentation by V. Kostiusyn)

Mr Vasiliy Kostiusyn delivered a presentation on "Activities, achievements, gaps in the 1st year of the project implementation" where an overview of implementation of EMBLAS 1 was provided with pointing out the main achievements and gaps as per project activities (collection of Questionnaires, preparation of Diagnostic report, development of Compliance Indicators, Water Quality Methodology, Joint Survey Methodology). It was mentioned that all working documents are kept on project intranet with easy access for all project partners.

Mr Vladimir Mamaev thanked the speaker for the presentation and invited the participants to make comments. He mentioned that there is a lot of work to be done under current phase of the project. The acceleration of the activities in EMBLAS 1 is directly connected with launching of the activities in EMBLAS 2. EU donors insisted on the launch of EMBLAS 2 project as soon as possible, therefore, EMBLAS 1 project outputs are the basis for inputs of EMBLAS 2. Also he mentioned that EMBLAS 2 has been financially launched on 1st of April 2014. EMBLAS 2 operating activities can be started when 60-70% of EMBLAS 1 outputs are achieved, but before December 2014 EMBLAS 1 results are to be finalized in full. Also Mr Mamaev mentioned that some administrative vacancies for EMBLAS 2 were already announced. Then he stressed that the key result for EMBLAS 1 is the Diagnostic report.

2. EMBLAS Diagnostic Report (presentation by V. Velikova)

Mrs Violeta Velikova started her presentation with remark that Diagnostic report is the most important document for the EMBLAS project. She gave an overview of the history of Diagnostic Report 1 as of 2009-2010 years with financing by EEA, the purpose of this report was to prove that Black Sea data are well collected as per EC/EEA indicators, disseminated and accessible for all interested parties. Based on this Diagnostic Report 1, two projects - MISIS (in 2012- Romania, Bulgaria, Turkey) and EMBLAS 1 (in 2013- Russia, Georgia, Ukraine) were launched with the purpose to collect information on the Monitoring of the Black Sea, data management/assessments, and on the quality control of data collected. The EMBLAS Diagnostic Report 2 was prepared by different organisations, experts from different countries, and legal experts as well. It consists of more than 400 pages of valuable information. A summary of the Diagnostic report will be prepared and communicated with Ministries of Environment in all involved countries. Mrs Velikova mentioned what steps were undertaken during preparation of the Report, what results are expected from this Report, what major gaps in Monitoring of the Black Sea are identified, what questions are to be discussed. She stressed that the main purpose of the Monitoring system revision/improvement aimed by EMBLAS is to initiate a harmonized approach to the monitoring processes in all involved countries, i.e. identification of the Integrated Monitoring, development of common legislative/policy basis for monitoring, identification of levels for financial support to involved parties to be included in state budgets. Also she pointed out that national Quality standards vary, it means that set of SOPs is to be developed and offered to national authorities for its use in national monitoring programmes.

Discussion on major gaps and uncertainties:

Mr Korshenko mentioned that there are some legislative acts in Russia which claim that ecological monitoring is to be provided but no detailed steps are developed. Monitoring of biodiversity is also not regulated in RU. There are Decisions # 681 and 477 which are recommending that SOI is obliged to provide bio monitoring data, in general, but no detailed framework is regulated still.

Mrs Shiganova pointed out that there is no cooperation among different state bodies (RAS, Ministries) in Russia which are responsible for ecological monitoring. Mrs Shiganova said that she was involved in different environmental projects since 1999 year, but she needs to mention that no data on bio resources were collected in full.

Mr Korshenko mentioned that project-oriented approach in ecological monitoring is used in Russia but not on a governmental level: no common federal programme is implemented in Russia.

Mrs Violeta Velikova said that tender-oriented approach is not effective in ecological monitoring because no data exchange is ensured, and sustainability is not provided.

Mr Sergey Konovalov mentioned that special mechanism of data exchange is to be developed.

Mrs Violeta Velikova described the situation in Turkey and Bulgaria with monitoring of the Black Sea: tender-based approach is implemented in Turkey which is not so effective in long-term perspective. As for Bulgarian experience, there is a special governmental programme which is regulated by legislative documents and even special institutional framework is developed based on nominated state bodies which are financed by state budget and being responsible for submission of relevant data on a regular basis.

Mrs Marine Arabidze said that in Georgia a special Public Awareness and Information Environmental Centre was founded after series of reforms on Ministry's level. In general, Georgia became more open for data exchange after this reform.

Mr Borys Aleksandrov shared his experience with data submission to the Ministry of Ecology of Ukraine, what gaps exist, he mentioned the main problem in data exchange for academic organisations is the protection of the rights of authors; no data can be shared until it is published and two years have passed since publication. The only solutions can be the following: data are provided to Ministry and name of author is included into a published report.

Mr Vasiliy Kostyshyn mentioned that the capacity building is to be the main goal for development of monitoring framework; information flow sustainability is also the main factor.

There were some comments from other participants on the topic. Mrs Violeta Velikova concluded that a lot of work is still ahead to finalize the Diagnostic Report II (DRII). After the meeting a long list of questions to all partners will be distributed with a deadline of response. And those partners who have not yet provided their contributions/comments on the DRII were invited to do so. Mrs. Velikova reminded that the contribution of partners is not expected in the part 'editorial work or improvement of orthography', but in improvement of the conclusions and recommendations of the DRII. Each partner organisation and EMBLAS expert have in their ToRs 'DRII recommendations'.

3. Recommendations on the revision of national and regional monitoring programmes: optimistic and realistic scenarios (presentations by all partner organisations)

Mrs Violeta Velikova gave an overview of the framework of EU projects which are tasked to monitor ecological situation in the Black Sea region (MISIS, IRIS EC). The results of those projects can be analyzed and used for the purposes of revision of the monitoring. She mentioned that the revision is the list of detailed recommendations for the purpose of monitoring change, in this regard; she invited the participants to give their vision of optimistic and realistic scenarios. She gave a general information about revision of monitoring activity in EC countries, which steps have been undertaken, what is the structure of EC integrated monitoring system (EC directives), what common indicators are used by countries (Bulgaria, Romania, Turkey). She mentioned another project - EPIRB which activities are aimed at development of river basins management and strategy; she mentioned that rivers and seas are connected systems therefore the monitoring of rivers is very important and harmonization of the BS countries practices is an issue. However, EPIRB does not particularly deal with rivers monitoring harmonization.

There followed a discussion with comments of experts about consistent monitoring of wetlands zones (required by RAMSAR), one-mile zones, gulfs/bays and open sea. Also it was mentioned the specific nature of the Black Sea as a sea almost isolated from the World Ocean. EMBLAS deals with introduction of MSFD principles into the Black Sea monitoring, therefore, mostly the sea beyond 1-mile offshore is of interest. However, the improvement of monitoring should strongly take into consideration also the so called WFD-geographical scope – coastal waters, since their status is very important for countries and Black Sea ecosystem as a whole.

Mr Vladimir Mamaev concluded that well-structured system of integrated monitoring of the Black Sea is the main expected outcome of EMBLAS project, thus identification of extents to which Black Sea is to be monitored in the framework of EMBLAS project is an important issue. In this regard he offered to nominate a working group for effective discussions on this matter.

Further on, short presentations were delivered by the partner organisations in the following order:

Mrs Olga Konareva presented Odessa National I.I.Mechnikov University "Recommendations for Modification (Improvement) of National (UA) and Regional (Whole Black Sea) Monitoring Programmes: Optimistic - Realistic Scenarios (Authors- Volodymyr Medinets, Olga Konareva);

Mr Yuriy Denga -UkrSCES recommendations;

MR Aleksander Boltachev – IBSS overview;

Mr Borys Aleksandrov – OB-IBSS: he mentioned that it is very important to name all contributors of the Diagnostic report II from an authorship point of view.

Mr Vladimir Mamaev agreed that all authors of the Diagnostic report II chapters are to be named in the final version of the report and announced the end of the morning session.

Day 1, Afternoon session, 22 May 2014, 14.30- 19.00

Chair: Vladimir Mamaev (UNDP-BRC)

The afternoon session was continued by short presentations of partner organisations:

Mr Sergey Konovalov presented MHI;

Mrs Nino Machitadze – TSU;

Mrs Marine Arabidze-- NEA Tbilisi;

Mrs Tamara Shiganova/MR Valery Chasovnikov –SIO-RAS;

Mrs Irina Makarenko- BSC (BSIMAP activities);

Mr Aleksander Korshenko presented SOI.

Conclusions and proposals on how to revise the monitoring programmes:

Mr Konovalov has drawn the participants' attention to the fact that there is a dramatic discrepancy between different national and international institutions in understanding and implementation of monitoring. This discrepancy is hardly to overcome by a single decision and any EMBLAS proposal can be easily criticized and turned down at national ministerial levels. Thus, a "ideal" regional scheme can be proposed by the EMBLAS project. If this scheme is legally adopted by national representatives of the Black Sea Commission, it will become a regional monitoring programme. If so, nationally responsible bodies will formulate national programmes, as a part of this regional programme. A part of this regional programme would become a basic ministerial monitoring programme, some other parts might be accounted as national and international projects, and/or they will be gradually incorporated into the national programme. Yet, far more important to formulate the regional programme based on joint open data base, which will serve as a basis for calculation of indicators, pressures and drivers, scenarios, and for improvement of monitoring.

After discussion it became clear that there was no common understanding on how to proceed with the work planned in PA3. Mrs Violeta Velikova concluded that there should be a work on monitoring definitions, and first Template of the Proposal on Monitoring Revision/Improvement (PMR/I) should be agreed. The document is to be developed for each country, PMR/I, and should include information on the purpose of the exercise, detailed description of strategy, actions for improvement of the monitoring depending on country needs including data management, etc. It was mentioned that there is a need to take into account all relevant indicators, which will be agreed, to identify BS GES and the integrated monitoring should meet the needs of all stakeholders: scientists, decision makers, public users. The plan of actions on how to reach the 'ideal monitoring' should cover at least nearest 10 years and keep the main aim of EMBLAS 'in mind' – to provide of knowledge-based and ecosystem-based Black Sea environmental protection.

Reminder: the ecosystem-based approach differs from the traditional management of the environment being based on a long-term prospective – ensure sustainability in Nature use for many decades ahead.

Mrs Velikova proposed to prepare a first draft of the Template for the PMR/I, which will be discussed by the end of the meeting.

4. Operational (real-time) monitoring: options for its inclusion as integral part of national monitoring programmes, cost-effectiveness (presentation by S. Konovalov)

Chair: Vasiliy Kostushyn (UNDP-Ukraine)

Mr Sergey Konovalov delivered a presentation about the BS real-time monitoring: purpose, options, trends, changes, suggestions on effective use of operational monitoring methods in the integrated monitoring system: satellite data, drifters, etc.

The major topics of this presentation: (i) elements and possibilities of real-time monitoring are available; (ii) real-time monitoring is very possible and it will be extremely useful for countries and for the region; (iii) it is not expensive; (iv) the major limitation is in the lack of experience.

There followed a discussion and opinion exchange on the topic. Mrs Shiganova mentioned that data of operational monitoring gives a ground for identification of impacted zones.

Mr Denga said that UkrSCES uses MHI data in its daily work.

Mr Korshenko remarked that real-time monitoring data are very useful for particular research of chlorophyll fields, but we need to be careful with the final results.

5. Training programme, information on the preparation of the first training (presentation by Y. Denga)

Mr Yuriy Denga gave an analysis of training needs and presented the draft EMBLAS training programme. This Training Programme deals with the needs in capacity building, so helps to improve the performance of Black Sea laboratories in chemical monitoring and related QA/QC. EMBLAS elaborates on the details in the field of harmonization of chemical methods and preparations for introduction of new parameters and methods to better assess the Black Sea water, sediment and biota quality. The EMBLAS Questionnaire¹ responses were analysed, and the information provided showed limited capacities of most Laboratories to perform **complex Black Sea monitoring** (including all media as required by BSIMAP). Commonly water quality monitoring is developed, whereas sediment and biota are not attended. There are **no regularly conducted trainings** in the EMBLAS beneficiary countries, therefore training of young professionals is an issue for all organisations involved in Black Sea monitoring (lack of funding is the main reason for no regular trainings). The trainings which took place during the last 5 years in the region were implemented in the frames of different international projects (see Chapter V in the EMBLAS Diagnostic Report) and they were mainly theoretical courses without particular practical exercises on spot. The list of laboratories, participating in the training programme implementation, shall first of all (but not exclusively) include the laboratories nominated as national centres in the framework of BSIMAP:

- NEA Fisheries and Black Sea Monitoring Centre, Batumi (Georgia);
- Laboratory "Specialized Centre on Hydrometeorology and Environment Monitoring of the Black and Azov Seas" (Sochi) and the Hydrometeorological Bureau of Tuapse (Russia);

- UkrSCES (Ukraine).

Discussion and recommendations for further development of the Programme and tentative trainings to be organised:

There were no discussions on the Training programme, there was only expressed willingness to participate or to recommend participants for the Chemical trainings.

Mrs Violeta Velikova mentioned that the Chemical training programme will be expanded by the Biological Training programme. This will help to improve capacity building in ecological monitoring for young generation among scientists.

6. Compliance indicators (presentation by BSC PS)

The presentation was cancelled due to absence of presenter Mrs Oksana Tarasova, EMBLAS NFP Ukraine.

7. Joint Cruise Methodology (presentation by SIO-RAS)

The presentation was announced to be delivered on 23 May 2014 due to lack of time on 22 May 2014.

Mr Vasiliy Kostiusyn announced the end of Session of Day 1.

Day 2, Morning Session, 23 May 2014, 09.30-13.30

Chair: Vladimir Mamaev (UNDP-BRC)

The p.6 of the Agenda presentation "Compliance Indicators" was cancelled due to absence of Mrs Oksana Tarasova.

Mrs Violeta Velikova gave a short overview regarding the compliance indicators issue. She mentioned that there is a regional strategic plan, the main policy document which was signed in 1996 (the first one), for the implementation of the Bucharest Convention and its three protocols (later the Biodiversity Protocol was added); this Strategic Plan set a goal to develop Compliance Indicators. Later, the 1996 SAP was revised and adopted by the BS states in 2009. With the change of the SAP, the need to further development the BS regional compliance indicators emerged.

Mrs Velikova thanked Mrs Tarasova and the UkrSCES team for their input into the development of compliance indicators. She invited all project partners to attend the provided documents by Mrs Tarasova and UkrSCES and to give their contributions, expressing opinion what compliance indicators they would recommend.

Mr Vladimir Mamaev asked about comments/questions.

There were no comments on the topic.

7. Joint Cruise Methodology (presentation by SIO-RAS)

Mr Aleksander Mikaelian presented the "Joint Cruise Methodology" and mentioned that the main goal of the joint cruises is to provide ecosystem monitoring of the open waters of the Black Sea. The reason is the following: the open basin with its key processes in the ecosystem, which are crucial for understanding the long-term climate and anthropogenic impacts, is not included in the national monitoring programmes. The joint cruises seem to be the best way for resolving this problem.

The main objectives were highlighted:

- To develop of a long-term monitoring strategy based on the identified scientific needs as well as existing capacities
- To evaluate an areas of joint research, time and frequency of observations and measured parameters
- To estimate and provide recommendations for cost-efficiency of the Cruise
- To suggest a scheme of data exchange between the partners based on uniform methodology for processing and data storage in joint data bases
- A parallel objective is also to provide a platform for training, education and inter-calibration

Also the presenter paid attention to main scientific priorities, time periods, measured parameters which are to be taken into account before any joint cruises.

Also cruise management aspect has been communicated: how many days, what budget resources, what type of vessels are needed for the purpose of join cruises.

Mr Vladimir Mamaev invited the audience to submit their offers/ideas for the future joint cruises-when, where, who. He also mentioned that joint cruises are the integral part of EMBLAS 2 project. He said that Mr Mikaelian is nominated to be a focal point for provision of detailed proposal for EMBLAS 2 activities regarding joint cruises for 2015 year.

Discussions and recommendations for the further development of the Methodology:

All project partners were invited to get acquainted with the Methodology and submit their comments/contribution.

There were no comments.

8. Water Quality (WQ) database/concept (presentation by R. Lisovskyi)

Mr Richard Lisovskyi presented the concept for development of Water Quality Database (WQDB) for the countries of the Black Sea Region.

It was proposed to further develop BSIS (The Black Sea Information System) through the following activities:

- 1) developing the central Black Sea Water Quality Database as an upgrade of the Black Sea Information System (BSIS) of the BSC, thereby incorporating the ongoing development of the Regional Database on Pollution (RDB-P), which was partially funded in the frame of the Baltic2Black project;
- 2) sustaining and further developing the Black Sea Mnemiopsis and Phytoplankton databases as part of BSIS;
- 3) concept for interaction between the central Black Sea Water Quality Database and other Black Sea regional data management infrastructures (e.g. created under Emodnet, SeaDataNet), as well as the interoperability with the WISE-Marine (EEA) and SEIS;

- 4) successful cooperation with other projects (PERSEUS, COCONET, EMODNET) in improving the Black Sea data bases.

The Baltic2Black Sea Project ended in 2013. The Regional Data Base-Pollutions (RDB-P) database further development is going to take place in the EMBLAS Project ("Improving Environmental Monitoring in the Black Sea", funded by EC DG Devco). EMBLAS includes an activity where the RDB-P, as a component of BSIS, is going to be upgraded to a web-based Black Sea Water Quality Database (initially as a prototype, then in EMBLAS II it will become fully operational). EMBLAS plans to also develop a regional Phytoplankton data base and to further develop the existing regional *Mnemiopsis* data base, both of them as parts of the BSIS. Compatibility/interoperability of the BSC data base components with WISE-MARINE, SEIS, SeaDatNet, EmodNET and other data infrastructures will be developed or enhanced.

Within EMBLAS the role of the BSC PS is important, since the BSC PS is responsible for annual compilation of data from the Black Sea countries and preparation of different regional reports.

It will be important to set-up the rules for the database usage, e.g. what kind of information from the Database can be available for the data providers, the authorship, etc. Many existing databases are not for public use and it is difficult to obtain data from them.

It has been suggested, that the EMBLAS Project uses the results of BlackSeaSCENE, UpGradeBSSCENE, EMODNET, SEADATANET, EnviroGRIDS, PERSEUS, CoCoNet, Baltic2Black, MISIS, in improving the BS data bases.

Mr Vladimir Mamaev invited the participants for discussion.

Discussions and recommendations for the further development of the WQDB:

Next version of the WQDB concept will be elaborated shortly after the Batumi meeting and uploaded on the webpage of the project. All project partners will be informed and invited to comment/contribute. A virtual workshop shall be conducted for the relevant experts to get acquainted with the functionalities of the existing RDB-P. A special working group will be formed to speed up the work on the WQDB Prototype preparation taking into consideration the data products expected to be produced by the WQDB. These products will depend on the WQ/GES Methodology, which is planned for development by EMBLAS under PA2.

9. Status of the regional Mnemiopsis Database, needs for further development and options for the development of a regional Phytoplankton Database (presentation by A. Boltachev)

Mr Aleksander Boltachev gave an overview of the status of the regional Mnemiopsis Database. He mentioned that IBSS conducts monitoring investigations of gelatinous zooplankton (jellyfish - ctenophores and medusae with focus on alien species- Mnemiopsis and Beroe) from 1998 to the present time. These works include determination of abundance (quality and biomass), peculiarities of distribution, and evaluation of size structure. The analysis of size, composition and abundance of jellies

has shown that population of Mnemiopsis in the deep water part of the Black Sea was properly maintained due to fry, coming from the coastal regions. Tendency to lower abundance of Mnemiopsis near the coast and deep water part of the sea was observed in the first decade of the 21 century, when there was an increase of average monthly temperatures over average many-year temperatures. Mass development of Beroe ovata in these years led to suppression of Mnemiopsis population, abundance of which decreased everywhere. On the contrary, late appearance of Beroe and its not high abundance in "cold" 2003-2004 conditioned preservation of high abundance of Mnemiopsis, which in its turn negatively influenced on the condition of the Mesozooplankton. But the following "warm" years optimised the situation.

Mr Boltachev stressed that the initial format of the Mnemiopsis Database (as per idea of Mr Vladimirov) is not sustained by the Black Sea countries since 2010, but IBSS consistently collects data two times per month in the coastal waters and they are stored in a database (developed by Mr Melnikov and updated by Mr Ignatiev. He said that the way for further development of the Mnemiopsis Database is to restore the circle of contributors.

Discussions and recommendations for the further development of the regional Mnemiopsis Database:

There were no comments on the topic.

10. Report on the results of the Biological Guidelines workshop (presentation by B. Aleksandrov)

Mr Borys Aleksandrov reported about the Agenda of the Biological Guidelines Workshop which was planned to take place in Odessa on 13-14 May 2014, however, postponed because of the unstable political situation in Ukraine. It was planned to invite 28 participants from 10 institutes to discuss the issues in five working groups: Microphytobenthos, Macrophytobenthos, Microzooplankton, Mesozooplankton, Macrozooplankton.

He also mentioned that this workshop was initiated as a continuation of previous practice exercises:

- 1) Workshop on Macrophytobenthos – 3-5 March, 2004 (Ukraine, Odessa)
- 2) Workshop on Phyto- and Zooplankton – 15-19 August, 2005 (Ukraine, Odessa)
- 3) Workshop on Macrozoobenthos – 12-14 September, 2005 (Bulgaria, Varna)

As result of those workshops three manuals were published and are kept on the Black Sea Commission web-site for public use:

- 1) "Manual for quantitative sampling and sample treatment of marine soft-bottom Macrobenthos" compiled by V. Todorova/T. Konsulova;
- 2) "Manual for zooplankton sampling and analysis in the Black Sea region" compiled by A. Korshenko/ B. Aleksandrov (still need to be finalized and published);
- 3) "Manual for Phytoplankton sampling and analysis in the Black Sea region compiled by S. Moncheva.

During the Biological Guidelines Workshop it was planned to discuss Biological indicators of environmental status and species composition in the check-lists and their distribution in aquatic area of each Black Sea countries. There were also draft recommendations given by Mr B. Aleksandrov for further discussions:

- 1) to prepare the guideline for sampling and investigation the Mesozoobenthos;
- 2) to check English translation in all manuals (Guidelines);
- 3) to pay attention at current literature for species identification;
- 4) to discuss final versions of prepared guidelines with experts of Bulgaria, Romania and Turkey;
- 5) to publish final version of Guidelines in one book (on the web-site of BS Commission).

Mr Vladimir Mamaev invited the participants for discussion.

Discussions and recommendations for the further development of the Guidelines:

It was concluded to conduct the Biological Workshop in Istanbul and it is expected that the Guidelines on Zooplankton and Macroalgae to be finalized by EMBLAS I. EMBLAS II will deal with other biological guidelines so that to promote further harmonization of BS monitoring.

11. Set of SOPs, QA/QC and DQC Guidelines (presentation by UkrSCES and MHI on the Set)

Mr Yurii Denga gave an overall opinion on the issue: there is no need in one unified methodology of QA/QC, there is a need in comparable results of monitoring. He mentioned that UKRSCES uses Methodologies of the Monaco Laboratory (IAEA) which are very effective from practical point of view. Every Methodology is to be validated by particular laboratory. But the results are directly dependent on the level of qualifications of the scientists.

Mrs Violeta Velikova stressed that the project goal is to offer a set of methodologies for common use by different laboratories, not a simple unification but recommendation on the best practices in this area in the aim of achievement of comparable results.

Discussions and recommendations for the further development of the proposed Set:

Mr Sergey Konovalov offered to submit to UkrSCES the descriptions of Methodologies used by every institute (project partner) for further compilation into one SOP.

Mr Yurii Denga mentioned that there is no need to develop SOPs for QC because it is regulated by ISO 17025.

Mrs Violeta Velikova concluded that there is a need to task proper experts in development of SOPs for QA/QC: how, when, where and by what devices the QC is to be ensured.

It was decided that Mr Denga, Mr Konovalov and Mr Chasovnikov will submit Lists of SoPs used in their laboratories. Then a decision will be taken on what Set of SoPs is to be recommended to the Black Sea experts dealing with monitoring.

Mr Vladimir Mamaev offered to start the Discussions/Questions session to be led by Mrs Violeta Velikova which was planned to be conducted in the afternoon session.

Discussions/Questions on the activities for the 2nd year of the project

Chair Mrs Violeta Velikova (EMBLAS STA)

- **WQ/GES classification, state of the Art (reported by UkrSCES):**

Mrs Violeta Velikova gave the floor to Mr Yurii Denga to speak on the topic of WQ/GES classification.

Mr Denga mentioned the difficulties in usage of GES indicators in scientific research, for example, "Beast" indicator (adopted from the HEAT tool of HELCOM) cannot be used if no background concentration data are available (what is the limit for normal/high background concentration for coastal/transitional/open waters?). Also he stressed that there were some doubts about effectiveness of reporting the environmental status based on one indicator like "Beast". Mr Aleksander Mikaelian emphasized the GES issues are very popular topics for discussions in every scientific conference/project but there is a proper need to extract most optimal indicators from the whole GES set and offer them for a particular use with a particular purpose.

Mrs Velikova concluded that she will offer first draft set of GES indicators based on the experience in Romania, Turkey and Bulgaria, then this draft will be sent to experts for their comments and contribution. The set of GES indicators will be tested during EMBLAS II pilot projects and joint cruises.

Mr Vladimir Mamaev announced end of Morning Session and invited all participants for "Family Photo" session.

Day 2, Afternoon Session, 23 May 2014, 14.30-18.30

Chair Mrs Violeta Velikova (EMBLAS STA)

- ***Harmonization of chemical methods- which are the priorities? Where ISOP 17025 is not applied and how we have to advance harmonization? (lead by UkrSCES)***

Mrs Violeta Velikova announced that it is planned to conduct a Workshop on 29 September-02 October 2014 where an experts' working groups will work together with the BSC PMA AG on the issues of methods harmonization. Tentative Agenda and list of participants will be disseminated later on.

Mr Konovalov mentioned that it was agreed during previous sessions to share the information and experience on the methods used by partner institutes. This will help to identify the gaps and ways forward, i.e. to improve the methods harmonization.

Mr Denga added that for the time being there is a need not in harmonization but in inventory of methods used. Note: such inventory is available for BG, RO and TR.

Mr Nino Machitadze offered to agree **on common procedure** for sampling, conservation and storage for specimens which will improve the possibility of achievement of comparable results by different laboratories.

Mr Denga agreed with Mrs Machitadze. He said the harmonization of sampling will significantly reduce the biases and provide comparable results for further analysis.

Mrs Violeta Velikova concluded that working meeting on methods harmonization is agreed in general, detailed agenda is to be developed as per needs and ideas of EMBLAS experts. The Harmonization workshop will be named: Methods of sampling, conservation and storage of samples of sea water, sediments and biota.

All relevant experts of EMBLAS are invited to provide ideas how exactly the workshop will be conducted, there will be one almost full day dedicated to this harmonization activity.

- **Information on the status of SAP IR and SoE regional reports (led by BSC PS)**

Mrs Irina Makarenko gave an overview of the status of SAPIR and SoE reports from BSC PS perspective.

She mentioned that SAPIR:

- highlights the priorities and actions therein considering the progress in the region and the current state of the environment;
- describes the policy actions required to meet the major environmental challenges now facing the Sea, and includes a series of management targets;
- recognizes the same environment threats as those identified by the MSFD (loss/degradation of biodiversity/habitats, contamination by dangerous substances/nutrients and impacts of climate change), however, sets no environment targets, but only operational according to four Ecosystem Quality Objectives.

She stressed that for the time being the process of preparation of SAPIR and SoE reports includes:

- Ongoing negotiations with relevant organisations;
- BSC PS is still seeking for assistance (both financial and expert) to proceed with both reports;
- compilation by BSC PS and relevant experts, main results and recommendations to amend the BS SAP 2009, incl. draft texts for Ministerial Meeting 2015.

As Bucharest Convention was elaborated more than 20 years ago, latest version of BS SAP is dated 2009, therefore new challenges as climate change, marine litter, marine

noise, green economy, MSFD requirements were not reflected or remain insufficiently addressed. In this regard, BSC PS prepares the necessary steps for amendments:

- in January, 2014 the request to appoint the national consultants was sent by the BC PS;
- in the lack of finances to draft the SAPIR and not having received the nominations, the BSC PS undertook the initiative to draft the SAPIR for 2009-2014 based on the information provided by the members of the BSC, BSC NFPs, BSC AGs and ACs per country for the period 2009-2014.

Mrs Makarenko emphasized that SoE preparation is postponed due to lack of funding but EMBLAS recommendations can be included into the draft template.

There followed a discussions who is the recipient of BSC PS Questionnaires, who can make inputs into SAPIR/SoE drafts.

Mrs Violeta Velikova concluded that BSC may invite EMBLAS experts for participation in working groups on the SoE development when initiated.

- **Needs of GE and UA for ad hoc support in relation to the Association Agreements (with EC)- reported by NFP GE and UA**

Mrs Marine Arabidze (NFP Georgia) gave an overview of the main perspectives in the activity of National Environmental Agency of Georgia. She mentioned that NEA is nominated as the main state body for implementation of EU Environmental Framework Directives in Georgia. In this regard NEA submitted a Programme document to the Government of Georgia with their vision of mandatory activities in environmental sphere. For the time being, it was decided to conduct Initial Assessment during next five years for identification of main donor profiles and financial resources required either national or international ones for implementation of the Programme. Mrs Arabidze stressed that assistance of EMBLAS experts is very crucial for NEA activity in Georgia.

Mrs Violeta Velikova mentioned that NEA have to send an official letter directly to EMBLAS Management in UNDP RBEC office with request to include NEA needs into EMBLAS budget activities.

On behalf of Mrs Oksana Tarasova (NFP Ukraine) Mrs Irina Makarenko requested EMBLAS to consider the needs of Ukraine in relation to the Association Agreement with EC.

Mr Vladimir Mamaev agreed with requests of NFPs Georgia and Ukraine but asked to make it in writing with detailed break-down of actual needs.

Discussions/Questions on the visual identity of the project, financial and reporting issues and any other business (lead by UNDP)

Mr Vladimir Mamaev gave the floor to Mrs Marcela Fabianova to speak on the topic.

Mrs Marcela Fabianova explained to the audience how the project is administered by UNDP, implemented by partner organisations and experts. She also mentioned the types of contracts, reporting schedule as per TORs, payment schedule as per approved reports.

There are two types of contracts:

- Individual Contracts (IC) for experts;
- Letters of Grant Agreement (LoA) for partner organisations.

Therefore there are two types of reporting and payment procedures which were described by Mrs Fabianova in details. Also she mentioned that there is no need to submit supporting documents to financial reports (as per LoA) but to keep them in organisations' archives for 5 years for audit purposes.

Mr Vasiliy Kostiusyn stressed that during reporting phases it is very important to submit all mandatory documents as per each TOR deliverables. The easiest way for documents submission is to create respective folders for each expert/partner organisation on the EMBLAS intranet and to put all documents there.

There were some questions/concerns regarding travel arrangements, payment to partners from Crimea, which were explained by UNDP staff in details.

Conclusions:

By the end of the meeting Mrs Velikova presented a draft Template for the Proposal on Monitoring improvement. As no agreement was reached on the Template, it was decided to distribute it after the meeting and give deadline for comments and further development by the partners.

Mrs Velikova reminded that the current BS monitoring misses water bodies and water bodies at risk identification, there are no reference stations identified, habitats are poorly studied, fishery and bathing waters are left without cooperation with the national 'water quality' type of monitoring. Sediments and biota contamination are either not studied or poorly attended; mammals, marine litter and underwater noise are completely neglected, etc., etc. Besides, overlapping of activities is often observed, and the existing capacities in the countries are poorly used to optimize the monitoring. The operational monitoring is stubbornly not taken seriously, and is not the part of the national monitoring programmes.

Mrs Violeta Velikova reminded also that all EMBLAS experts need to make their inputs into development of a draft regional monitoring programme based on national programmes improvements and best practices of Black Sea countries like Turkey, Bulgaria, and Romania. The existing draft BSIMAP Proposal on revision/improvement will be further developed in parallel with the proposals for the national level monitoring.

Mr Denga stressed that in Ukraine a new monitoring programme was recently submitted by UkrSCES to the Ministry of Environment for approval. But this national programme can be improved and further developed where necessary.

Mr Vladimir Mamaev emphasized that all experts and partner organisations should perform all their tasks as per TOR to their individual contracts and LoA in order to achieve the targeted outcome of the EMBLAS project in due time.

End of the Meeting

Summary of decisions taken

1. Project management

All working documents are already kept on project intranet with easy access for all project partners. They (including POs quarterly reports!) should be regularly updated by responsible Partner organisations/experts

2. Diagnostic Report

A lot of work is still ahead to finalize the DRII. After the meeting a list of questions to all partners will be distributed with a deadline of response. And those partners who have not yet provided their contributions/comments on the DRII were invited to do so. Contribution of partners is not expected only as the part 'editorial work or improvement of orthography', but in improvement of the conclusions and recommendations of the DRII. Each partner organisation and EMBLAS expert which has in their ToRs 'DRII recommendations' should contribute in it substantially.

3. Recommendations on the revision of national and regional monitoring programmes:

Well-structured system of integrated monitoring of the Black Sea is the main expected outcome of EMBLAS project, thus identification of extents to which Black Sea is to be monitored in the framework of EMBLAS project is an important issue. At the same time recommendations on the revision of national and regional monitoring programmes are still far from the finalization and need strong speed up. Recommendations should cover both levels -national and regional, and be developed based on international framework documents (MSFD, WFD, BSIMAP etc.), and take into account experience already accumulated in other countries and at international level (BSC etc.). Integrated monitoring programmes also should meet the needs of all main stakeholders.

EMBLAS deals with introduction of MSFD principles into the Black Sea monitoring, therefore, mostly the sea beyond one-mile offshore is of interest. However, the improvement of monitoring should strongly take into consideration also the so called WFD-geographical scope – coastal waters, since their status is very important for countries and Black Sea ecosystem as a whole.

The plan of actions to reach the 'ideal monitoring' should cover at least nearest 10 years and keep the main aim of EMBLAS 'in mind' – to provide for knowledge-based and ecosystem-based BS environment protection.

A draft Template for the Proposal on Monitoring improvement was presented, but no agreement was reached on the Template. It was decided to distribute it after the meeting and give deadline for comments and further development by the partners.

All EMBLAS experts need to make their inputs into development of a draft regional monitoring programme based on national programmes improvements and best practices of Black Sea countries like Turkey, Bulgaria, and Romania. The existing draft BSIMAP

Proposal on revision/improvement will be further developed in parallel with the proposals for the national level monitoring.

4. Operational (real-time) monitoring

Operational monitoring should be an important part of revised monitoring programme and need to be adjusted in general scheme of integrated monitoring which will be developed within EMBLAS, but limitations of remote sensing methods should be carefully taken into account.

5. Training programme

The EMBLAS Questionnaire¹ responses were analysed, and the information provided showed limited capacities of most Laboratories to perform *complex Black Sea monitoring* (including all media as required by BSIMAP). There are *no regularly conducted trainings* in the EMBLAS beneficiary countries, therefore training of young professionals is an issue for all organisations involved in Black Sea monitoring (lack of funding is the main reason for no regular trainings). The list of laboratories, participating in the training programme implementation, shall first of all (but not exclusively) include the laboratories nominated as national centres in the framework of BSIMAP.

It should be taken into account that beside training programme (which is already drafted), still should be finalised training materials.

6. Compliance indicators

First drafts of Compliance Indicators were prepared by Mrs Tarasova and UkrSCES. All project partners should attend the provided documents to give their contributions, expressing opinion what compliance indicators they would recommend.

7. Joint Cruise Methodology

The "Joint Cruise Methodology" and mentioned that the main goal of the joint cruises is to provide ecosystem monitoring of the open waters of the Black Sea.

All project partners were invited to get acquainted with the Methodology and submit their comments/contribution.

Participants of the EMBLAS project should to submit their offers/ideas for the future joint cruises-when, where, who. It also was mentioned that joint cruises are the integral part of EMBLAS 2 project. Mr Mikaelian was nominated to be a focal point for provision of detailed proposal for EMBLAS 2 activities regarding Joint cruises for 2015 year.

8. Water Quality data base

Concept of WQDB was presented and agreed. Next version of the WQDB concept will be elaborated shortly after the Batumi meeting and uploaded on the webpage of the project. All project partners will be informed and invited to comment/contribute. A virtual workshop is to be conducted for the relevant experts to get acquainted with the functionalities of the existing RDB-P. A special working group will be formed to speed up the work on the WQDB Prototype preparation taking into consideration the data products expected to be produced by the WQDB.

9. Status of the regional Mnemiopsis Database

The initial format of the Mnemiopsis Database (as per idea of Mr Vladimirov) is not sustained by the Black Sea countries since 2010, but IBSS consistently collects data two times per month in coastal waters and they are stored in a database (developed by Mr Melnikov and updated by Mr Ignatiev).

It was proposed the way for further development of the Mnemiopsis Database is to restore the circle of contributors, to make it really regional for the whole Black Sea region. No final decisions were made on how this Database will be linked with BSIS or other regional information systems.

10. Report on the results of the Biological Guidelines workshop

The Biological Guidelines Workshop which was planned to take place in Odessa on 13-14 May 2014, however, postponed because of the unstable political situation in Ukraine. List of participants and agenda agreed. The workshop will be moved to Istanbul and it is expected the Guidelines on Zooplankton and Macroalgae to be finalized by EMBLAS I. EMBLAS II will deal with other biological guidelines (Meiobenthos etc.) so that to promote further harmonization of Black Sea monitoring.

11. Set of SOPs, QA/QC and DQC Guidelines

It was agreed that there is no need in one unified methodology of QA/QC, there is a need in comparable results of monitoring. The project goal is to offer a set of methodologies for common use by different laboratories, not a simple unification but recommendation on the best practices in this area. It was decided Mr Denga, Mr Konovalov and Mr Chasovnikov will submit Lists of SoPs used in their laboratories. Then a decision will be taken what Set of SoPs will be recommended to the BS experts dealing with monitoring.

12 Other issues considered during Discussion/Questions session

- **WQ/GES classification**

Still there quite many difficulties in usage of GES indicators and still not always clear their effectiveness in the reporting on environmental status. There is a proper need to extract most optimal indicators from the whole GES set and offer them for a particular use in Black Sea region.

- ***Harmonization of chemical methods***

It was announced that Workshop on 29 September-02 October 2014 where an experts' working groups will work together with the BSC PMA AG on the issues of methods harmonization. Tentative Agenda and list of participants will be disseminated later on.

All relevant experts of EMBLAS are invited to provide ideas how exactly the workshop will be conducted, there will be one almost full day dedicated to this harmonization activity.

As agreed, sharing the information and experience on the methods used by partner institutes will help to identify the gaps and ways forward, i.e. to improve the methods harmonization. At the same time it was stressed that harmonization of chemical methods in fact not the most important issues (they just should be used correctly), but the harmonization of sampling will significantly reduce the biases and provide comparable results for further analysis.

- **Information on the status of SAP IR and SoE**

It was concluded that BSC may invite EMBLAS experts for participation in working groups on the SoE development when initiated.

- **Needs of GE and UA for ad hoc support in relation to the Association Agreements with EC**

NFPs GE and UA have been asked to make their requests in writing with detailed breakdown of actual needs.

General Reminder for all participants

All Partner Organisations and experts should carefully check their Deliverables against ToR and time table, and finalize all necessary reporting documentation:

- for POs – Narrative Reports, Time Sheets, Financial Reports, Deliverables
- for experts – Deliverables.

The Minutes were compiled by Lilia Spasova (EMBLAS Project Assistant) on 06 June, 2014, with inputs by Violeta Velikova (EMBLAS Senior Technical Advisor) and Vasiliy Kostiyshyn (EMBLAS Project Manager).



DRAFT AGENDA

Coordination Meeting of Partner-Organisations/ Experts of the project

“Improving Environmental Monitoring in the Black Sea” (EMBLAS)

21 May – 24 May, 2014;

Place: Radisson Blu Hotel, Batumi –

1 Ninoshvili Street – 6000 – Batumi – Georgia

Day 1 – 21 May

Arrival and accommodation

Dinner

Day 2 – 22 May

Morning Session: 09:30 – 13:30

Chair: Vladimir Mamaev (UNDP-BRC)

1. Activities, achievements, gaps in the 1st year of the project implementation (Review of where we stand in PA1 – PA7 activities accomplishment): presentation Project manager
2. EMBLAS Diagnostic Report (PA1, PA4): presentation Violeta Velikova/Sergey Konovalov

Discussion on major gaps and uncertainties: All Experts (lead by Violeta Velikova)

(Note: There will be questions to all partner-organisations in relation to the gaps/uncertainties identified during the preparation of this major EMBLAS report)

Coffee break (11:00 – 11:30)

3. Recommendations on the revision (modification) of national and regional monitoring programmes¹: optimistic and realistic scenarios (PA3 with input from PA1):

Introduction to PA3 – Violeta Velikova

Short presentations (10 min) of all partner organisations on the issue:

- ONU
- UkrSCES
- IBSS
- OB-IBSS
- MHI
- TSU
- NEA
- SIO-RAS and its Southern Branch (Gelendzhik)
- BSC PS (on BSIMAP)
- SOI (20 min – with explanation to the partners how the work in PA3 is going to be centred, what template shall be followed to present the proposed revisions/modification of monitoring programmes)

Discussion, conclusions, plan for the further work in preparation of proposals for the revision/modification of monitoring programmes (lead by SOI)

13:30 – 14:30 Lunch

Afternoon Session: 14:30 – 18:30

Chair: Vasily Kostyushin (UNDP-BRC)

4. Operational (real-time) monitoring: options for its inclusion as integral part of national monitoring programmes, cost-effectiveness (PA3): presentation MHI

Discussion, ideas: All Partner-organisations shall express opinion² (lead by MHI)

5. Training Programme, information on the preparation of the first training (PA5): presentation UkrSCES

Discussion, recommendations for further development of the Programme and tentative trainings to be centred (according to the priorities in the EMBLAS beneficiary countries): All Partner-organisations shall express opinion³ (lead by UkrSCES)

Coffee break (16:00 – 16:30)

6. Compliance indicators (PA2): presentation BSC PS

Discussion, recommendations for further development of the Indicators: All Partner-organisations shall express opinion (lead by BSC PS)

7. Joint Cruise Methodology (PA6): presentation SIO-RAS

Discussion, recommendations for further development of the Methodology: All Partner-organisations shall express opinion (lead by SIO-RAS with the support of MHI)

¹ **Aim** of monitoring programmes modification – provide for knowledge-based and ecosystem-based environment protection management. See the **Introduction** of the EMBLAS Diagnostic Report for more information on the issue.

² The partners (order of Agenda Item 3 above to be followed) shall be ready to speak about available practices in real-time monitoring, which can be proposed to become the part of national monitoring programmes taking into consideration the aimed revision of the latter.

³ **Note:** In this Agenda, where **All partners are mentioned to express opinion**, the order of Agenda Item N3 will be followed. All partner-organisations are kindly asked to prepare opinion on the issues of discussions.

Dinner: 19:30

Day 3 – 23 May

Morning Session: 09:30 – 13:30

Chair: Vladimir Mamaev (UNDP-BRC)

8. Water Quality (WQ) Database/Concept (PA7 with input from PA2): presentation UkrSCES
Discussion, recommendations for further development of the WQ Database: All Partner-organisations shall express opinion (lead by UkrSCES)

9. Status of the regional Mnemiopsis Database, needs for further development and options for the development of a regional phytoplankton Database (PA7): presentation IBSS
Discussion, recommendations for further development of the regional Mnemiopsis Database: Relevant experts shall express opinion (lead by IBSS)

Coffee break (11:00 – 11:30)

10. Report on the results of the Biological Guidelines Workshop (PA3): presentation OB-IBSS
Discussion, recommendations for further development of the Guidelines and other Guidelines to be attended in line with the priorities: Relevant experts shall express opinion (lead by OB-IBSS)

11. Set of SoPs, QA/QC and DQC Guidelines (PA5): presentation (jointly presented proposal by UkrSCES and MHI on the Set)
Discussion, recommendations for further development of the proposed set: All Partner-organisations shall express opinion (lead by UkrSCES)

13:30 – 14:30 Lunch

Afternoon Session: 14:30 – 18:30

Chair: Violeta Velikova (UNDP-BRC)

Discussions/Questions on the activities for the 2nd year of the project (until the final meeting of Partners) regarding main deliverables (unattended above) and meetings/workshops in line with the WorkPlan of EMBLAS

- WQ/GES classification (PA2), State of the Art: reported and lead by UkrSCES and BSC PS
- Harmonization of chemical methods – which are the priorities? Where ISO 17025 is not applied and how we have to advance harmonization?: (PA2 and PA3) lead by UkrSCES
- Information on the status of SAP IR and SoE regional reports⁴ (PA2 – related to the work on compliance indicators and WQ/GES classification): reported and lead by BSC PS
- Needs of GE and UA for *ad hoc* support in relation to the Association Agreements (with EC)⁵ (PA2): reported by NFPs of GE and UA

Coffee break (16:00 – 16:30)

Discussions/Questions on the visual identity of the project, financial and reporting issues, and any other business: All Partner-organisations shall post questions and express opinion (lead by UNDP)

UNDP reminds about reporting obligations, status of contracts, and informs on payments.

⁴ Regional Strategic Action Plan Implementation Report and Black Sea State of the Environment Report – 5-yearly.

⁵ *Ad hoc* support and advice on policies, legislative reforms and enforcement related to the relevant sections of the Association Agreements of Georgia and Ukraine. Such support was envisaged in EMBLAS.

Conclusions and closing of the meeting

Social Programme/Dinner: 19:30

Day 4 – 24 May

Departure of Participants

Coordination Meeting of Partner Organisations and Experts

EU-UNDP Project "Improving Environmental Monitoring in the Black Sea" (EMBLAS)

22-23 May 2014, Batumi, Georgia

List of participants

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