



# **Hot Spots Diagnostic Report**

## **guiding improvements in the Black Sea LBS monitoring**

### **Questionnaire**

**Project: Integrated hotspots management and saving  
the living Black Sea ecosystem  
HOT BLACK SEA  
2.2.1.72761.225 MIS-ETC 2303**

## The Questionnaire

The purpose of this questionnaire, prepared in the frame of the Project Hot Black Sea, is to identify your organization's observational and informational capacity in the area of **Black Sea-related** LBS/Hot Spots monitoring, data collection and management. Based on your feedback, the following questions shall be answered in a special report, named Hot Spots Diagnostic Report<sup>1</sup>:

1. What is the legislation framework of LBS/Hot Spots and ambient environment monitoring in your country and what kind of change/advancement in national legislation/policy shall be recommended to ensure sustainability of this kind of monitoring in support of ecosystem-based management of Black Sea environmental protection in your country?
2. What is the legal/policy framework of LBS/HotSpots management in your country?
3. What is the institutional framework of LBS/HotSpots management in your country?
4. What is the institutional framework of LBS/Hot Spots monitoring in your country and what changes in it we shall propose to ensure a complex monitoring implementation in the most optimal way (cost-efficient and time-saving) in your country?
5. What is the present Black Sea LBS/HotSpots monitoring in your country (parameters, frequency of sampling, etc.) and for the next 5-6 years what kind of new parameters and methods shall be seen feasible to incorporate in the existing monitoring programmes?
6. What we would propose to integrate the monitoring of LBS/HotSpots with that of state/impacts/vulnerability observed in the Black Sea?
7. What data storage and data management tools are presently used in your organization and what improvements we should suggest?
8. What is the system of Quality Assurance and Quality Control (QA/QC) presently used in the field of monitoring and data management, and what improvements we should suggest?

**Note:** LBS/HotSpots in this Questionnaire are **point land-based sources** of pollution/eutrophication: industrial and municipal sources, and rivers.

### Abbreviations used:

LBS – land-based sources of pollution

HS – hot spots<sup>2</sup>

QA – quality assurance

QC – quality control

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<sup>1</sup> Full name of this report, as given in the Project Workplan is: State of the art of the Hot Spots monitoring and ambient environment, relevance for identification of most threatened areas in the Black Sea and determination of the areas under largest threat of pollution (update of the knowledge)

<sup>2</sup> Definition from the LBSA Protocol ([http://www.blacksea-commission.org/\\_od\\_LBSAProtocol.asp](http://www.blacksea-commission.org/_od_LBSAProtocol.asp)) to the Bucharest Convention: "Hot spot" means a limited and definable local land area, stretch of surface water or specific aquifer that is subject to excessive pollution and necessitates priority attention in order to prevent or reduce the actual or potential adverse impacts on human health, ecosystems or natural resources and amenities of economic importance.

**I. General**

Name of organization	Postal address/webpage	Contact person (name, address, tel/fax, e-mail, skype)	Name of the person who fills in the Questionnaire and contact details

What type is your organization?

Governmental       NGO       Private       other (please specify here)

Please specify your organization's field?     LBS Monitoring     Ambient Monitoring<sup>3</sup>     LBS Management

Other: (please specify here)

Is your organization part of a national monitoring system?     Yes       No

If Yes, please specify/describe.

What other national and international networks related to monitoring/data collection is your organization part of?

**Note:** Please press the enter key in the field above in order to add more lines.

Is your organization affiliated to a Ministry, Academy or other organization?     Yes       No

If Yes, please specify.

**II. Black Sea LBS/Hot Spots Monitoring and Management**

**1. Legal/policy instruments and institutional framework (Note: please add to the Tables as many lines as you need)**

A. International environmental legislation (conventions, multi- and bilateral agreements relevant to the LBS monitoring and/or management performed by your organization; print dates when these instruments have been entered into force in your country)

N	Title of Convention or Agreement	dd.mm.yy of ratification	Level	Relevance to <sup>4</sup>

**Note:** In the column 'Level' please print **Global** (UN Conventions, for instance), or **Regional** (Bucharest Convention, for instance), or **Other** in case of multi- and bilateral agreements.

<sup>3</sup> Monitoring nearby LBS to relate pressures with impacts.

<sup>4</sup> Please specify 'LBS Monitoring', 'Ambient Monitoring' and/or LBS Management.

B. European environmental legislation having relation to monitoring of LBS/Hot Spots

N	Title of Convention, Directive or Agreement	Date of enforcement	Transposed to the national legislation		
			Bulgaria	Romania	Turkey

**Note:** in case of **Ukraine and Georgia**, please list European policy and legislation, which are taken into consideration in your country and somehow reflected in your national legislation/policy.

C. National environmental legislation (please specify laws, decrees, other legal acts related to the monitoring performed by your organization; print dates when these instruments have been entered into force or to your management activities)

N	Title of National Legal Act	dd.mm.yy	Relevance to <sup>5</sup>

D. Administrative instruments (statements, resolutions, ministerial regulations, orders, national standards, guidelines, methodologies, etc. related to the monitoring performed by your organization or management activities, including sub-national level instruments)

N	Title of Document	dd.mm.yy	Relevance to <sup>5</sup>

E. Responsible organizations for monitoring and management of LBS (those which provide the budget for the monitoring carried out by your organization and approve the program, and/or those which deal with LBS management)

Name of organization	Postal address/webpage	Contact person (address, tel/fax, e-mail, skype)	Responsibility of the organization <sup>6</sup>

<sup>5</sup> Please specify 'LBS Monitoring', 'Ambient Monitoring' and/or LBS Management.

<sup>6</sup> Please specify 'LBS Monitoring', 'Ambient Monitoring' and/or LBS Management. In case of monitoring, please specify beneath the Table if there is a special monitoring program governed by this organization, and please attach it as an Annex to this Questionnaire or give a Link to it.

- F. Please, describe in a short text and where possible in a chart flow<sup>7</sup> the LBS management process implemented in your country according to the national legislation.
- G. Please specify the gaps you see in legislation/policy and institutional framework which prevent you to sustain and/or further develop the monitoring and/or management conducted by your organization.
- H. Please specify shortly or demonstrate in a chart the changes you would recommend in the institutional framework of LBS monitoring and management and list the documents which need to be revised or those which need to be in future developed.

## 2. Type of monitoring implemented by your organization, stations, parameters, frequency

Type of monitoring <sup>a</sup>	Is the monitoring regular? (Yes/No) <sup>8</sup>	Geographical scope	Time period (years from-to)	Frequency of sampling per year <sup>b</sup> (from-to)	Number of stations per year (from-to) <sup>9</sup>	Number of parameters per sampling campaign (from-to)

<sup>a</sup> **Note: For ambient monitoring:** e.g., Environmental complex monitoring; Water quality; Ecotoxicological monitoring; Surveillance monitoring<sup>10</sup>; Compliance monitoring<sup>11</sup>; Operational monitoring I (based on real-time observations<sup>12</sup>) or Operational monitoring II (the one related to the WFD, for

<sup>7</sup> The text and/or the Chart are expected to demonstrate the subordination of organizations and distribution of responsibilities in the system.

<sup>8</sup> If the answer is No, please under the Table give a short explanation why and explain what is the mode of implementation of the monitoring.

<sup>9</sup> For **Rivers** count only those stations which are used to calculate loads of rivers directly stemming to the Black Sea. For **municipal and industrial sources** please count those stations which are used to calculate discharges/emissions of direct or indirect proven and expected impact on the Black Sea no matter how far from the coast is the source. **Accordingly, a primary (direct) and secondary (indirect) sources of contamination would qualify for consideration, if pollution is transported to the Black Sea finally. In some cases, secondary sources could be located at a distance more than 100 km inland from the sea.**

<sup>10</sup> **Surveillance monitoring** is usually the environment monitoring for trends (complex and routine monitoring);

<sup>11</sup> **Compliance monitoring** is the one checking the relevance of water quality and level of discharges against certain norms (governmentally established);

<sup>12</sup> **Operational monitoring I**- real time (satellites, radars, any automatic devices working for real-time collection of data).

instance)<sup>13</sup>, Fisheries surveys (and collation of fisheries data), Biodiversity monitoring, Seabirds Monitoring, Habitats Monitoring, etc. For **LBS Monitoring**: State, private or Other (pls specify).

<sup>b</sup> **Note:** Please specify as Reference to the answer of this question (in a Footnote) whether the monitoring is regular or not. Give any other detail you think important.

Please provide:

A. Map of sampling stations (with appropriate resolution) and list with coordinates in the Table below:

LBS name	Code of station (if any)	Coordinates	Type of station <sup>a</sup>
		Latitude: 45.1333 Longitude: 29.2765 <sup>14</sup>	

<sup>a</sup> **Note:** For **LBS monitoring**: municipal, industrial or river. For **ambient monitoring**: transitional, coastal or marine waters, if such a specification exists in your organization.

B. List of parameters with frequency of observations.

Media <sup>15</sup>	Parameter	Analytical Method <sup>16</sup>	Frequency of sampling per month/per year

C. Does your monitoring provide for long-term trends? If yes, please list for which parameters trends are regularly updated (up to-date, and specify since when).

D. Please specify what parameters are covered by **real-time data** and what equipment is used for each parameter.

Parameter	Equipment	Period (since when or from-to)

<sup>13</sup> Monitoring of water bodies at risk to evaluate the efficiency of measures taken.

<sup>14</sup> This is an example how to present the coordinates.

<sup>15</sup> In discharge (e.g. waste water from different sources, river run-off), in emissions (for air pollution), in water and or sediments and/or biota (for ambient monitoring).

<sup>16</sup> Name of the method and Reference.

Parameter	Equipment	Period (since when or from-to)

E. Please specify major gaps in the monitoring implemented by your organization.

### 3. Procedures of QA/QC in the field and in laboratory

A. Please provide References of major guiding documents and where possible links.

B. Please list proficiency tests/exercises which your organization takes part in and their frequency.

C. Please specify the needs of your organization to improve QA/QC in the field and in laboratory.

### 4. Reporting of data (to whom, kind of formats used)

A. If the data are reported (not the assessments), please specify to whom.

Name of organization	Postal address/webpage	Contact person (address, tel/fax, e-mail, skype)

**Note:** Please provide links to formats used (if any), or the Formats themselves where possible (as Annex to this Questionnaire).

### 5. On-going projects (national and international) with Black Sea-related LBS monitoring component in which your organization takes part (**Note:** the projects which are currently implemented regardless the starting date)

A. Please provide the name of the project and link to its website, duration, very brief annotation for the national projects (objectives of the project) and for each project specify major deliverables expected.

- B. Reporting to the projects (what data and how the data are reported, where stored) – please give short information; if there are project databases, please specify and give the link.

### III. Data management, data products, QC procedures applied, classifications, assessments

#### 1. Please provide information on availability of Black Sea data base(s) in your organization

*Note: if you have more than one data base, please insert rows and describe each of them in separate.*

Name of the data base (if any)	Link (if any) <sup>a</sup>	Year of launch <sup>b</sup>	Type of data base <sup>c</sup>	Is the data base linked to models? <sup>d</sup>	Terms of access

<sup>a</sup> **Note** – if the data base is not on-line, please specify it and provide brief information on how the data base is replenished.

<sup>b</sup> **Note** – when the data base became operational? If the data are kept in Excel sheets or similar (not organised in a data base through specialised software), please specify the first year when an initial data have been stored electronically (e.g. not on hard copy in Protocols only).

<sup>c</sup> **Note** – specify how the data base is organised (Excel, DBF, ACCESS, Microsoft SQL Server (2008-R2 or other), ORACLE, etc.)

<sup>d</sup> **Note** – if yes, please specify in separate what kind of models and what these models are used to simulate.

- A. Please list the parameters in the data base.

- B. Please describe how often the data base is replenished with data/information and how quality assurance and control<sup>17</sup> are organised.

#### 2. Black Sea data products

- A. Please list what indicators are automatically calculated or produced with query in the data base (**Note: not the initial data but the derivatives of them**).

<sup>17</sup> E.g.: Is there automatic check for outliers in the data base? Who is responsible for the quality of data in the data base? What is the qualification of people replenishing the data base with data/information – are they experts in the data they upload?

Indicator (unit)	Regularly produced? (Yes/No)	Statistical method applied (if any)	Type of representation (Data Product automatically delivered) <sup>a</sup>

<sup>a</sup> **Note** – the indicator can be derived from the data base in Table and Figures, or distribution/classification (quality classes) maps/GIS.

B. Please list what kind of statistical softwares are used in your organization.

C. Please list what kind of software/s is used in your organization to prepare data products.

### 3. QC procedures in data management (DQC)

A. Please provide References of major guiding documents in DQC used in your organization and where possible links.

B. Please specify the needs of your organization to improve QC in data management.

### 4. Please specify what are the major gaps in data management in your organization

### 5. Please list what kind of Black Sea-related LBS assessments are regularly prepared by your organization

Name of assessment/Report	Frequency and since when	Assessment model (if any) <sup>18</sup>	To whom the report is delivered	Where published (link, if any)

### 6. Please specify what you would recommend to improve the assessments prepared by your organization

<sup>18</sup> E.g. DPSIRR model, DPVIR, etc.

**IV. Capacity building/Trainings**

1. Please specify what kind of trainings is regularly conducted in your organization.

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2. Please specify what trainings have been organised by your organization during the last 5 years.

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3. Please specify what trainings have been attended by experts of your organization during the last 5 years (other than those specified above).

Name of training	Year	Organised by

4. Please specify what kind of trainings you would recommend to be organised to increase the monitoring (including QA/QC) and data management capacity in your organization.

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**V. Harmonization needs**

Please specify what are the needs in harmonization related to LBS monitoring and management (including legislation/policy) in your opinion.

A. National level

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B. Regional level

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