

**FINAL REPORT OF THE ACCOBAMS SURVEY INITIATIVE PROJECT (ASI)**

**ACCOBAMS SURVEY INITIATIVE**  
**Final report of the ACCOBAMS Survey Initiative project (ASI)**

**Note:**

This report aims to provide a detailed description of the activities and main results of the ACCOBAMS Survey Initiative which was conducted in the Mediterranean Sea and Black Sea between 2017 and 2022. This synthesis was compiled by taking elements from a very detailed document reporting on the intermediate assessment of the project, at the end of 2020, which was updated in November 2022. The period 2020-2021 was marked by the Covid health crisis, delaying and postponing many of the activities planned for the last phase of the project, originally planned for end of 2020. During 2020 all remaining activities planned in the project were finalized once health restrictions were alleviated, enabling a more normal activity, complemented by an adaptation to a new online approach. The ASI project has been fully and successfully completed, and officially terminates in December 2022, which is according to agreements concluded with external donors..

**CONTENTS**

ACRONYMS and ABBREVIATIONS .....	3
1. INTRODUCTION .....	4
2. PROJECT FUNDING SOURCES .....	5
3. OBJECTIVES .....	7
3.1 General objective .....	7
3.2 Specific objectives .....	7
4. ASI PROJECT STRUCTURE AND ACTIVITIES IMPLEMENTATION .....	9
4.1 COORDINATION AND MONITORING .....	10
4.1.1 Implementation .....	10
4.1.2 Results/outcomes .....	12
4.2. ACTIVITY 1 – SURVEY PREPARATION .....	15
4.2.1 Implementation .....	15
4.2.2 Results/outcomes .....	23
4.3. ACTIVITY 2 – SURVEY IMPLEMENTATION .....	25
4.3.1 Implementation .....	25
4.3.2 Results/outcomes .....	28
4.4. ACTIVITY 3 – DATA MANAGEMENT SYSTEM.....	29
4.4.1 Implementation .....	29
4.4.2 Results/outcomes .....	30
4.5. ACTIVITY 4 - DRONES .....	31
4.5.1 Implementation .....	31
4.5.2 Results/outcomes .....	31
4.6. ACTIVITY 5-ANALYSIS .....	32
4.6.1 Implementation .....	32
4.6.2 Results/outcomes .....	34
4.7. ACTIVITY 6- SPATIAL MODELING.....	34
4.7.1 Implementation .....	34
4.7.2 Results/outcomes .....	34
4.8. ACTIVITY 7 – CONSERVATION RECOMMENDATIONS .....	35
4.8.1 Implementation .....	35
4.8.2 Results/outcomes .....	36
4.9. ACTIVITY 8 – CAPACITY-BUILDING .....	37
4.9.1 Implementation .....	37
4.9.2 Results/outcomes .....	38
4.10. ACTIVITY 9 – SUSTAINABILITY .....	40
4.10.1 Implementation .....	40
4.10.2 Results/outcomes .....	41
4.11. ACTIVITY 10 – COMMUNICATION AND AWARENESS .....	42
4.11.1 Implementation .....	42
4.11.2 Results/outcomes .....	43

## ACRONYMS and ABBREVIATIONS

Action Air : Action Air Environnement SAS Action Communication  
 AFWP: The Arab Federation For Wildlife Protection  
 ACCOBAMS: Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area  
 AL LARK: Association AL LARK  
 ARCHIPELAGOS: Archipelagos Institute Of Marine Conservation  
 ASI: ACCOBAMS Survey Initiative  
 BS Black Sea  
 BSBD Black Sea Basin Directorate  
 BWI: Blue World Institute  
 Cleans Seas: Clean Seas International Ecological Fund  
 CeNoBS : Support MSFD implementation in the Black Sea through establishing a regional monitoring system of cetaceans (D1) and noise monitoring (D11) for achieving GES  
 CIMA : Research Foundation: Fondazione CIMA - Centro Internazionale in Monitoraggio Ambientale  
 CNRDPA : Centre National de Recherche en Pêche et Aquaculture (Algérie)  
 CNRS : Centre National de la Recherche Scientifique (France)  
 CNRS Lebanon: National Council for Scientific Research  
 DMAD: Deniz Memelileri Araştırma Derneği / Marine Mammals Research Association  
 EEAA: Egyptian Ministry of Environment and Egyptian Environmental Affairs Agency  
 EMBLAS: +: Environmental Monitoring in the Black Sea  
 EU European Union  
 GES Good Environmental Status  
 EcAp MEDII: Mediterranean Implementation of the Ecosystem Approach  
 IFAW: International Fund for Animal Welfare  
 IMAP : Integrated Monitoring and Assessment Programme  
 INAT : Institut National Agronomique de Tunisie  
 INRH : Institut National de Recherche Halieutique (Maroc)  
 INSTM : Institut National des Sciences et Technologies de la Mer (Tunisia)  
 IO-BAS Institute of Oceanology – Bulgarian Academy of Science  
 IPEE-RAS: A.N.Severtsov Institute of Ecology and evolution of the Russian Academy of Sciences  
 IUCN- Med: International Union for Conservation of Nature - Centre for Mediterranean Cooperation  
 ISPRA: Istituto Superiore per la Protezione e la Ricerca Ambientale  
 LPO - LIGUE POUR LA PROTECTION DES OISEAUX - NORMAND  
 MCR : Marine Conservation Research International  
 METU: Middle East Technical University  
 MORIGENOS: Slovenian Marine Mammals Society  
 MSFD Marine Strategy Framework Directive 2008/56/EC  
 NIMRD National Institute for Marine Research and Development “Grigore Antipa”  
 OFB : Office Français pour la Biodiversité  
 PELAGIS : Observatoire *PELAGIS* (Unité Mixte de Service 3462)  
 SPA/RAC: Regional Activity Centre for Specially Protected Areas  
 SOI: Federal State Budgetary Institution N.N. Zubov's State Oceanographic Institute  
 SINAY: SINAY, Maritime Data Solution  
 TUDAV: Turk Deniz Arastirmalari Vakfi/ Turkish Marine Research Foundation  
 UkrSCEC Ukrainian Scientific Centre for Ecology of the Sea  
 UNDP Syria: United Nations Development Programme  
 UNEP/MAP: The Mediterranean Action Plan of the United Nations Environment Programme  
 VC Voluntary Contribution  
 WP Work Package  
 WWF Greece: World Wide Fund For Nature in Greece

## 1. INTRODUCTION

The “ACCOBAMS Survey Initiative” (ASI) is a project that aims to establish an integrated, collaborative and coordinated monitoring system for the status of cetacean populations at the whole ACCOBAMS area level<sup>1</sup>, with the final aim to strengthen the conservation effort and governance for cetacean species. Developed and implemented by the ACCOBAMS Secretariat, in coordination and with the support of riparian countries and national scientists and experts, the ASI represented an unprecedented effort and a first step towards the regular assessment of cetacean abundance and distribution at the Agreement area level.

As a result of several years of work of the Scientific Committee, discussions within the Steering Committee and the Contact Group, and a series of consultations carried out during 2014 with Parties to the Agreement, Range States<sup>5</sup>, partners and potential external sponsors, the ASI project was initially described in the **Project Identification Document (PID)** developed in 2015<sup>2</sup>. This document was circulated to countries in 2015 to solicit their financial and technical contributions, and then presented during the Sixth Meeting of the Parties to ACCOBAMS (Monaco, 22-25 November 2016) when the ASI project was officially launched.

The PID had then to be adapted according to the priorities / requests of the different donors, mainly MAVAs and the Foundation Prince Albert 2, and their distinctive project descriptive formats. Following confirmation of additional funding sources and the official launch of the ASI project, the project Action Plan and its budget was revised and updated at a meeting of the ASI Steering Committee in February 2017. Consequently, the implementation phase of the project started in March 2017 and will end in December 2022.

Ultimately, the ASI project was declined into two phases:

**1- In the Mediterranean Region:** the ASI project has evolved as a fairly faithful variation of the PID, towards a definitive format described in the 2017 Action plan that supported the project implementation;<sup>3</sup> (

**2- The Black Sea region** had to be treated separately from the Mediterranean since a large part of the needed funding for the Black Sea Survey was still missing early 2017. Following the ACCOBAMS Secretariat fundraising efforts, the survey in the Black Sea could be funded through the EU funded project CeNoBS<sup>4</sup> in 2019. CeNoBS was a specific project led by Mare Nostrum, of which ACCOBAMS was a partner and a co-financer. The Black Sea aerial survey and associated activities were conducted as part of the CeNoBS project under the coordination of Mare Nostrum and ACCOBAMS Secretariat.

The present report is intended to synthesize the evolution of the project since its development and its implementation status to date.

---

<sup>1</sup> Constituted by “*all the maritime waters of the Black Sea and the Mediterranean and their gulfs and seas, and the internal waters connected to or interconnecting these maritime waters, and of the Atlantic area contiguous to the Mediterranean Sea west of the Straits of Gibraltar*” (Art. 1a) of the ACCOBAMS Agreement).

<sup>2</sup> EMC2-Lethier – ASI Project Identification Document (2015)

<sup>3</sup> ACCOBAMS Survey Initiative Action Plan (2017). The Action Plan of 2017 is composed of two tables: 1. the budget breakdown by activity according to the sources of funding and 2. the preliminary planning for the implementation of the activities.

<sup>4</sup> Grant Agreement No. 110661/2018/794777/SUB/ENV.C2 - CeNoBS: Support MSFD implementation in the Black Sea through establishing a regional monitoring system of cetaceans (D1) and noise monitoring (D11) for achieving GES.

## 2. PROJECT FUNDING SOURCES

### ❖ Mediterranean Sea

In August 2015, MAVA Foundation agreed in principle to support the ASI with 1.7 million euros for the ASI, on the condition that the beneficiary countries confirm their contributions to the project. MAVA's support was thus confirmed in 2016, following the round of consultation to countries late 2015, that led Italy (in 2015), France (in 2016) and Monaco (in 2016) to confirm respective Voluntary Contributions (VC) of 228 000 euros, 400 000 euros and 20 000 euros. This complemented the ACCOBAMS secured funds for the ASI project in the Mediterranean (90 000 euros) and the voluntary contributions granted by Spain in 2008 (300 000 euros)

A co funding from the FPA2 was also granted in 2016 (100 000 euros), consolidating the ASI budget for conducting the Survey and other activities in the Mediterranean Sea. Additional voluntary funding was provided by Italy in 2018 (35 000 euros), by Slovenia in 2019 (1 607 euros) and IFAW also provided a co funding directly to Marine Conservation Research to support specific boat survey actions of the ASI (50 000 euros).

Table 1. ASI funding sources (Mediterranean Region)

Funding source		Total amount in Euros
voluntary contributions	France – <i>Agence Française de la Biodiversité</i>	400 000
	Italy - <i>Ministero dell'Ambiente e della Tutela del Territorio e del Mare</i>	228 000
	Italy - <i>Ministero dell'Ambiente e della Tutela del Territorio e del Mare - VC 2017</i>	35 000
	Monaco - <i>Département des Relations Extérieures et de la Coopération – VC 2019</i>	20 000
	Spain (voluntary contribution of 2008) - <i>Ministerio para la Transición Ecológica</i>	300 000
	Slovenia – <i>Morigenos Slovenian Marine Mammal Society</i>	1 607
co-fundings	Fondation Prince Albert II de Monaco	100 000
	MAVA Foundation ASI	1 701 000
	MAVA Foundation ASI Evaluation	25 000
own funds	ACCOBAMS *	180 789*
TOTAL		2 991 396 €

\* 90 000 € were allocated to the coordination of the ASI in the Mediterranean and 90 789 € were allocated to the Black Sea Survey as co-funding to the CeNoBS project.

Additional support was provided for the organization of specific activities. The table below reports on the officialized support (through signed documents)

<i>IUCN Med</i>	<i>Undirect support</i>	<i>Letter IUCN Med 1<sup>st</sup> June 2018</i>	<i>2018</i>	<i>7 500 euros</i>	<i>For the organization of an ASI event for the launch of the survey in Malaga on 8 June 2018</i>
-----------------	-------------------------	---	-------------	--------------------	---

In addition to the cash support described above, all participating countries have provided in kind support to the project, through the mobilization of ASI Contacts group members, National Focal Points and scientific staff, and through a support regarding administrative aspects, meetings and ASI events organization.

### ❖ Black Sea

The ACCOBAMS Secretariat pursued its effort in identifying relevant funding to support the implementation of the survey in the Black Sea from 2016 (see table below). In 2018, the CeNoBS project was granted a financial support from the DG Environment of the European Commission under a call for proposals "Marine Strategy Framework Directive - Second Cycle: Implementation of the new GES Decision and programmes of measures" opened in March 2018, out of

which 243 850 euros were dedicated to the Black Sea survey, including the co-funding provided by ACCOBAMS (90 789 euros). CeNoBS project started to be implemented in January 2019 for a 2-year duration.

Russian water could not be surveyed as part of CeNoBS, nor without the direct intervention of a Russian organization. Via the [EMBLAS + project](#), the ACCOBAMS Secretariat could approach Russian Scientific Organizations and developed direct collaboration with them in order to conduct a survey over part of the Russian waters. The Secretariat provided a co-funding of 25 000 EU to complement the additional support of the EU-UNDP EMBLAS+ project (25 000 \$) and of Russian stakeholders.

<b>Source of funding</b>	<b>Type of support</b>	<b>Period</b>	<b>Amount (EU)</b>
European Commission	CeNoBS Grant	2018-2021	153 061 euros dedicated to the Survey activity, (2.2)
ACCOBAMS Secretariat	Own funds	2018-2019	90 789 euros provided as co-funding for CeNoBS survey activity
ACCOBAMS Secretariat	Own funds	2019	25 000 euros for the Survey in Russia

### 3. OBJECTIVES

The ASI project forms part of the commitments made by the Parties to ACCOBAMS<sup>5</sup> on the conservation of cetaceans (general objective B of the ACCOBAMS Strategy) and aims to respond to the ACCOBAMS strategic objective (B.1.1) on improving understanding of the conservation status of cetaceans:

- in the Mediterranean Sea (Actions B.1.1.1 and B.1.1.2);
- in the Black Sea (Action B.1.1.3).

Finally, it provides essential support to members of the European Union in protecting wildlife species of Community interest and their habitats and types of natural and semi-natural habitats<sup>6</sup>, and from the point of view of maintaining or restoring the good status of marine and coastal environments.<sup>7</sup>

#### 3.1 General objective

The overall objective of the project is to ensure at the macroregional level that public and private stakeholders in the Mediterranean/Black Sea region ***“have a coherent monitoring system for the species concerned in the Mediterranean/Black Sea ecoregion<sup>8</sup>, based on objective, robust and comparable data, with a view to improving the conservation status of these species and their habitats through appropriate management for the good status of the marine and coastal environments in the area of the study.”<sup>9</sup>***

#### 3.2 Specific objectives

The ASI specific objectives are to contribute primarily to:

- providing a deeper understanding of the abundance and distribution of the species in question at the Mediterranean Sea/Black Sea macroregional level, based on undisputed data<sup>10</sup>;
- strengthening international cooperation and synergy between the countries of the macroregion to optimise and increase the efficiency of their efforts to establish a transnational approach to conserving the species concerned;
- characterising the good environmental status of the study zone;
- maintaining and/or restoring this good status as well as the critical and preferred habitats of the species in question, both marine and coastal;
- progressing research/development in this field;
- providing guidance on the measures required to adapt to climate change.

The project should also meet the priorities of the action plans for the conservation of cetaceans, sea turtles and birds in the Mediterranean Sea, adopted by the Contracting Parties to the Barcelona Convention in 1991<sup>11</sup>, 1999<sup>12</sup> and 2003<sup>13</sup> respectively, and the relevant recommendations of the General Fisheries Commission for the Mediterranean

<sup>5</sup> In particular, Resolution 5.1 “ACCOBAMS Strategy (2014–2025)”, 2013.

<sup>6</sup> Council Directive 92/43/EEC, dated 21 May 1992, on the conservation of natural habitats and of wild fauna and flora (Annex II in particular).

<sup>7</sup> Directive 2008/56/EC of the European Parliament and of the Council of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (on this subject, see the five revisable elements of the plan of action for the marine environment adopted by the member countries and qualitative descriptor 1 – biological diversity – for determining good environmental status in the marine environment.

<sup>8</sup> UNEP(DEPI)/MED Decision IG.21/3 on the ecosystem approach (operational objectives 1.2 and 1.3) and § 2

<sup>9</sup> Annex III (table 1 – biological features) to the MSFD.

<sup>10</sup> Annex I – § 1 to the MSFD.

<sup>11</sup> UNEP/MAP/RAC SPA, not dated – Action Plan for the Conservation of Cetaceans in the Mediterranean Sea, 8 p. (§ 10 in particular, bullet 6) and the Strategic Action Programme for the Conservation of Biological Diversity in the Mediterranean (cf. the seven points set out to achieve this – SAP BIO, 14 November 2003).

<sup>12</sup> UNEP/MAP/RAC SPA, 1989 – Action Plan for the Conservation of Mediterranean Sea Turtles (rev. 1999).

<sup>13</sup> UNEP/MAP/RAC SPA, 2003 – Action Plan for the Conservation of Birds Listed in Annex II of the SPA/BD Protocol.



(GFCM) on reducing the number of accidental captures of cetaceans, seabirds and turtles in the GFCM's area of competence.<sup>14</sup>

It should as well contribute to the efforts being undertaken by States in the Mediterranean Sea/Black Sea macroregion to meet their international commitments with respect to biological diversity<sup>15</sup>, including the Aichi Targets<sup>16</sup>, and those linked to conserving wildlife and the natural environment in Europe.

---

<sup>14</sup> Recommendations GFCM/36/2012/2, GFCM/35/2011/2, GFCM/35/2011/3.

<sup>15</sup> Strategic Plan for Biodiversity 2011–2020.

<sup>16</sup> By contributing, in particular, to the achievement of Targets 1, 3, 5, 13–15, 17 and 19.

#### 4. ASI PROJECT STRUCTURE AND ACTIVITIES IMPLEMENTATION

The ASI project declined 10 activities in the Mediterranean Sea and 4 activities in the Black Sea that are summarized below. Detailed description of their implementation is provided in this section.

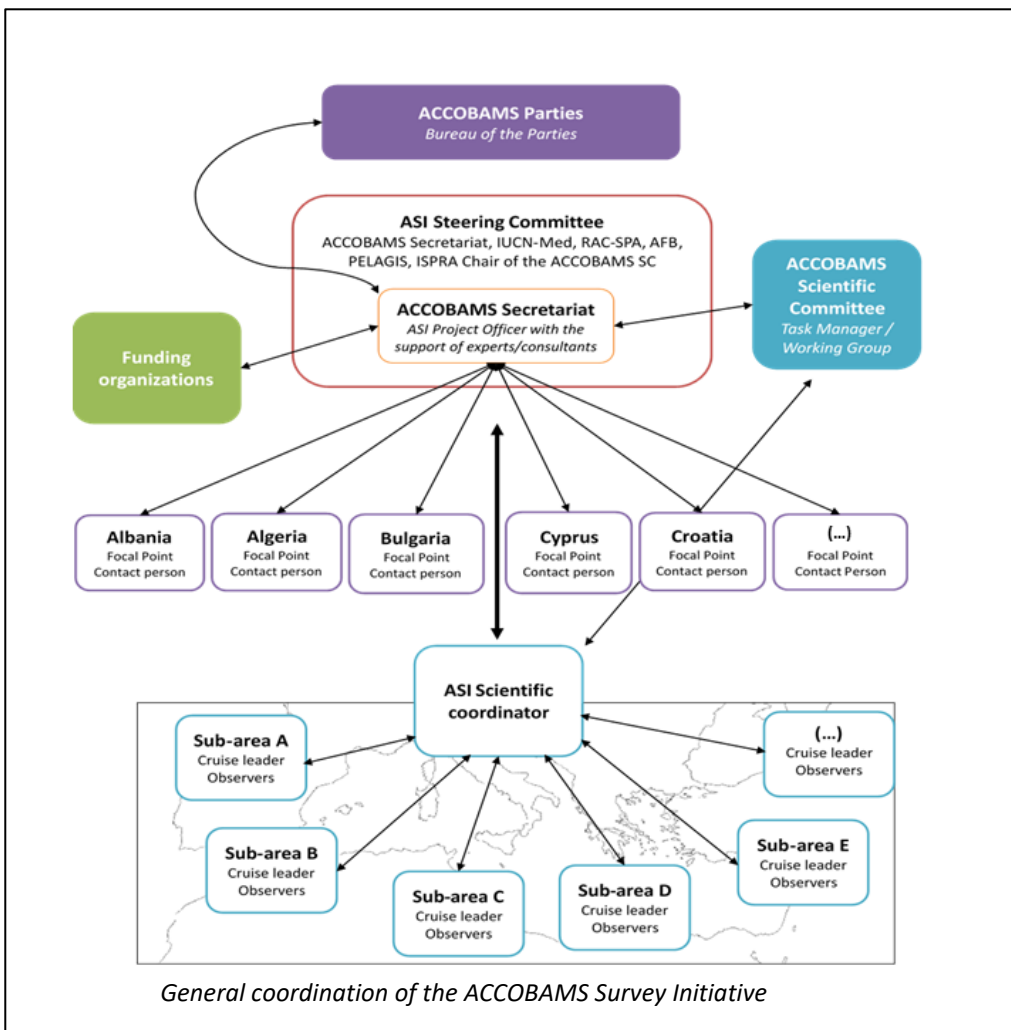
ASI Mediterranean Action Plan 2017 validated by the ASI Steering Committee on 6 February 2017		Black Sea Survey - CeNoBS Project 2019-2021	
<b>Coordination</b>	Project Coordination, Monitoring	<b>Activity 1.1</b>	Project coordination, reporting and monitoring
<b>Activity 1</b>	Definition of the standardized monitoring operational method, adjustment of protocols by monitoring sector, administrative and logistical preparation of field operations	<b>Activity 2.2</b>	Assessment of cetacean populations distribution and abundance at the regional scale
<b>Activity 2</b>	implementation of the survey coordinated by geographic sector conducted using the standardized method with a view to establishing a baseline status at the macroregional level	<b>Activity 2.2</b>	Assessment of cetacean populations distribution and abundance at the regional scale
<b>Activity 3</b>	pre-planning study for an information management system for data gathered during the survey exercise and in the medium and long terms	NA	
<b>Activity 4</b>	Using drones to monitor marine mammals	NA	
<b>Activity 5</b>	analysis of the results of the survey (abundance and distribution of species), and establishing links with the main anthropogenic pressures and protection measures, including national/regional measure	<b>Activity 2.2</b>	Assessment of cetacean populations distribution and abundance at the regional scale
<b>Activity 6</b>	Spatial modeling and identification of critical and preferential habitats	<b>Activity 2.2</b>	Assessment of cetacean populations distribution and abundance at the regional scale
<b>Activity 7</b>	drawing up of concrete recommendations to optimise existing measures to protect the species concerned and prioritisation of actions to be taken at all levels: national, subregional and macroregional	<b>Activity 2.2:</b>	Assessment of cetacean populations distribution and abundance at the regional scale
		<b>Activity 4.2</b>	Capitalization of the project results with the MSFD Competent authorities (
<b>Activity 8</b>	Training workshops for local stakeholders by subregion or group of subregions, in the use of the standardized survey method and in information management	<b>Activity 2.2:</b>	Assessment of cetacean populations distribution and abundance at the regional scale
<b>Activity 9</b>	Preparatory study for a long-term funding mechanism for monitoring operations relating to the species in question, through optimization of existing resources		
<b>Activity 9 Additional activity</b>	External intermediary evaluation & detailed roadmap project for the financial perpetuation of the ASI project		
<b>Activity 10</b>	Communicate on the project and sensitize socio-economic actors to the integration of the preservation of threatened species and their critical habitats in their activities	<b>Activity 4.1:</b>	Communication and dissemination of the project activities/results at the regional scale

4.1 COORDINATION AND MONITORING

4.1.1 Implementation

Reference	Activity description
Action Plan (2017)	- Coordination, Monitoring
CeNoBS (2019)	Work Package 1: Project coordination – Mare Nostrum WP 4 -Activity 4.1: Communication and dissemination of the project activities/results at the regional scale (implemented by TUDAV, CeNoBS Partner)

This activity included all aspects of project coordination at the ACCOBAMS Secretariat level (ASI project officer salary, secretariat travels, external assistance, expenses related to the ASI Steering committee meetings) and the organization of the ASI closing workshop.



## ❖ Mediterranean Sea

### a) Secretariat of ACCOBAMS

The ASI project is entirely coordinated by the ACCOBAMS Secretariat with the support of the ASI project officer who was recruited for the entire duration of the project. The ACCOBAMS Secretariat is responsible in implementing all the actions planned in the ASI, either directly or by coordinating the work of all involved stakeholders and entities mobilized for the project. Since the salary of the project officer is supported by the MAVA funding, which was granted in 2016<sup>17</sup>, the recruitment of the ASI project officer started in May 2016; the first call for application was not successful and decision was taken to open a second call in October 2016.

The ASI project officer was finally selected at the end of 2016 and took her position in April 2017, with the task to support the coordination of the ASI project at the Secretariat Level, in close liaison with the ACCOBAMS project/Programme officer and the Executive Secretary. Until her appointment/arrival, the project coordination was fully ensured by the ACCOBAMS project/Programme officer and the ACCOBAMS Secretary.

The ASI project officer and ACCOBAMS Secretariat members have participated to a large number of missions in the context of the project – particularly during the preparation and implementation phase of the survey and for communication purposes.

The ASI project officer is in charge of reporting to the donors (MAVA and FPA2 in particular, and to Mare Nostrum for the EU-funded CeNoBS), to the ACCOBAMS Parties, by preparing all related relevant ASI documents and to follow up on the ACCOBAMS Conservation Actions in link with estimation of abundance of population for all the ACCOBAMS Institutional Meetings (MoP, Bureau, Extended Bureau, national representatives meeting), Scientific Committee meetings, as well as to report to the NFPs and other entities of ACCOBAMS such as partners (on an opportunistic basis).

The ACCOBAMS Secretariat and the project officer also continued intensive fundraising effort to seek additional funding for the Mediterranean but also for the Black Sea as no funding had been secured beginning of 2017 for the Black Sea when the ASI was launched in the Mediterranean. These additional fundraising efforts could be summarized as follows: exchanges with IFAW to increase the boat based survey effort in 2018 (succeeded), request for equipment to Panasonic in 2018 (successful: adapted survey laptops were loaned), two proposals under EU calls for the Black Sea survey were submitted in 2017 (rejected) and 2018 (successful: EU funded CeNoBS project), exchanges with the Italian NFP for the allocation of part of the Italian voluntary contribution (successful, 35 000 EU added to the ASI budget) and a request to the MAVA Foundation to support the project evaluation in 2020 (successful, 25 000 EU).

The ACCOBAMS Secretariat also held several exchanges related to the use of the ASI Data, monitored and addressed all the requests received for the use of the ASI data and results. In particular exchanges were held with SPA/RAC, MEDPOL and the Barcelona Convention Secretariat to assess how the ASI data regarding cetaceans/sea turtles/marine litter distribution and abundance could be integrated in the 2023 Mediterranean Quality Status Report. The Secretariat and SC members participated at several meetings in this context, including to the CORMON meetings in December 2020, June 2021 and March 2022 and bilateral meetings with INFO RAC and the SPA RAC on the development of IMAP Info System and data dictionaries.

### b) ASI Steering Committee

The ASI Steering Committee is composed by representatives of key partnering entities (IUCN Centre for Mediterranean Cooperation, Regional Activity Centre for Specially Protected Areas (RAC/SPA), Agence Française pour la Biodiversité (AFB), PELAGIS, Italian National Institute for Environmental Protection and Research (ISPRA), Bucharest Convention

<sup>17</sup> Contrat de subventionnement pour le projet "ACCOBAMS Survey Initiative" (15085) - signed on 20/07/16 but a confirmation was given by MAVA by email the 05/02/2020.

Secretariat<sup>18</sup> and the Chair of the ACCOBAMS Scientific Committee<sup>19</sup> is also available to take part in the ASI Steering Committee.

The ASI Steering Committee provides advice and guidance to the ACCOBAMS Secretariat for all aspects linked with the coordination of the ASI project. The ASI Steering Committee met and consulted numerous times during the preparatory phase of the Survey (see results) and advised on several strategical aspects, including budget planning, selection of platforms and partners, but also teams review, scientific effort definition, etc.

The ASI Steering Committee is also regularly consulted through email, in particular to address the requests for the ASI complete data sets

### c) ACCOBAMS National Focal Points and ASI Contact Group Members

The ASI contact group is composed of (a) contact person(s) from each country who were nominated by the National Focal Points of ACCOBAMS (NFP) in 2014, in accordance with Resolution 5.9 “Comprehensive cetacean population estimates and distribution in the ACCOBAMS area (ASI)”<sup>20</sup>. The NFP and Contact person’s roles are to assist the ACCOBAMS Secretariat with several tasks along the course of the ASI project to facilitate the latter. Their involvement was particularly important for the preparation and implementation of the surveys.

In addition to sub-regional and regional meetings, additional and numerous bilateral exchanges were done as well, with the majority of ASI Contact Group Members along the course of the project (see above results).

### d) ASI Special Event

The closing workshop of the ASI was implemented under the form of an ASI special event in Istanbul, Türkiye, at the occasion of the 7th Meeting of the Parties to ACCOBAMS MoP7, November 4th 2019 AM, to present to the NFP an insight on the ASI survey campaign and the first results.

#### ❖ Black Sea

The overall coordination of the CeNoBS project was handled by Mare Nostrum. As a partner of CeNoBS, ACCOBAMS participated in several coordination related meetings and exchanges.

The ACCOBAMS Secretariat also handled the collaborations with the Russian scientific partners for the implementation of the Survey over Russian waters, from the seeking and identification of partners to the closing of the set-up collaborations, following receipt of all expected outputs. The ACCOBAMS Secretariat ensured the liaison between Russian partners and the CeNoBS consortium, including for the data analysis part.

## 4.1.2 Results/outcomes

#### ❖ Mediterranean Sea

The project has been successfully implemented and coordinated, with all activities completed. The following main results/outputs can be listed for the coordination task:

- **Reporting to all funders and ACCOBAMS Bodies completed until November 2022**
- **13 in person Coordination meetings for survey preparation (see table below)**

<sup>18</sup> The representative of the Bucharest Convention joined the ASI Steering Committee early 2020.

<sup>19</sup> Who is also the ASI Scientific Coordinator.

<sup>20</sup> ASI Contact group list and ACCOBAMS Focal Points list P

Meeting date and place	Purpose
Tunisia, May 22nd 2017	Réunion de coordination sur la mise en œuvre du projet ASI en Tunisie avec NFP + instituts de recherche de l'INSTM, INAT
Morocco, May 30th 2017	Réunion de coordination pour la mise en oeuvre de « l'ACCOBAMS Survey Initiative » au Maroc avec NFP (DPM) + institut de recherche INRH
ASI Adriatic Consultation meeting, Italy, June 6th 2017	preparation and implementation of the survey in 2018 (Contact group members of Albania, Montenegro, Croatia, Slovenia, Italy)
Egypt, August 2nd 2017	supporting the Egyptian ASI implementation group with the organization and coordination of the survey in Egyptian waters with EEAA + NFP + National scientific institutes
Lybia meeting September 14th 2017 in Tunis	organization of the survey in Libyan waters
Algeria, September 27th 2017	- audience de la Secrétaire Executive de l'ACCOBAMS avec le Directeur Général de la Pêche et de l'Aquaculture + NFP - Réunion collaboration ACCOBAMS/Algérie (NFP, DGPA et chercheurs CNRDPA)
ASI Contact Group Meeting Tunis – 3rd to 5th of October 2017	preparation and implementation of the survey in 2018 (regional meeting, 15 participating countries))
October 12 2017 - Athens, Greece	Meeting at WWF Greece Office regarding the possibilities of implementation of the survey in Greece -
Türkiye, Istanbul, February 13th 2018	Implementation of the ACCOBAMS Survey Initiative in Türkiye – design of Survey – at MFA + NFP + National expert
Athens, MFA, 17 April 2018,	Implementation of the ACCOBAMS Survey Initiative in Greece – Design of survey - with MFA + WWF Greece
Direction de l'Environnement, Monaco 2017-2018	One meeting and exchanges with ASI Contact Group member for preparation and implementation of the survey in 2018
Meeting at CAR ASP – September 2018	Réunion au CAR ASP pour la mise en œuvre de la composante Capacity-building de l'ASI
Cairo, 30 April 2019	Organization of the ASI boat survey in Egypt

➤ **Mobilization of ACCOBAMS National Focal Points and ASI Contact Group Members (see table below)**

Event	Format, date and place	Purpose
ACCOBAMS Survey Initiative Contact Group Meeting for the Adriatic	1 day meeting – June 6th 2017 - Rome, Italy	aimed at supporting the coordination between the Adriatic countries for a joint survey in this zone, and defining the articulation of the contributions identified so far by the countries
ACCOBAMS Survey Initiative Contact Group Regional Workshop	Tunis – 3rd to 5th of October 2017	ASI Contact Group members and experts from 15 countries of the Mediterranean, to work together on the preparation and implementation of the survey in 2018. All key aspects for conducting the aerial or ship-based surveys were discussed and strategized during plenary and working sessions along the week.
Consultations and updates	From 2017, all along the project	Various: for administrative aspects, permits, logistics, for communication, for seeking of observers...
Bilateral meetings	Several in person meetings Numerous emails/calls	Preparation of survey (see table of meetings of ACCOBAMS Secretariat)

- **11 ASI Steering committee meetings and continuous email exchanges and consultations since 2017**
- **ASI Special event organized in Istanbul, November 4<sup>th</sup>, at the MoP7 of ACCOBAMS, with 11 speakers and an audience of about 80 persons, including NFPs.**
- **Funding support received for the CeNoBS Project (EC DG-ENV), for the boat-based survey conducted by Marine Conservation research (IFAW), for the ASI evaluation (MAVA Foundation);**
- **Organisation of the aerial survey over the Russian waters to complete the CeNoBS Aerial survey;**
- **Fieldwork survey laptops loaned for Mediterranean and Black Sea surveys (from PANASONIC).**

#### ❖ **Black Sea**

- **Coordination and monitoring main actions, tools and meetings where ACCOBAMS Secretariat took part for the CeNoBS project and with Russian partners.**

<b>Event</b>	<b>Format, date and place</b>	<b>Purpose</b>
CeNoBS Project follow up	Trello Platform set up by Mare Nostrum at the beginning of the project	Dedicated platform for the CeNoBS consortium to follow the progress of activities, to do list, expected deliverables progresses, deadlines...
Kick Off meeting	Brussels, DG Env, 12/11/2019	Kick off meeting of the project at the DG Environment office
Advisory Board	Skype meetings: - October 28th 2019 - July 2020	
Partners meeting and coordination	Skype calls emails	Coordination meetings and exchanges to assess progresses and next steps
Project Reporting to EC	Emails and calls	Preparation of inception report early 2019 Technical and financial intermediary report of 2019
Follow up of the MoUs and Contract with Russian partners	Numerous emails calls	Preparation of survey Follow up of survey implementation Review and approval of received data and reports

## 4.2. ACTIVITY 1 – SURVEY PREPARATION

Reference	Activity description
Action Plan (2017)	Activity 1 - Definition of the standardized monitoring operational method, adjustment of protocols by monitoring sector, administrative and logistical preparation of field operations
CeNoBS (2019)	Activity 2.2: Assessment of cetacean populations distribution and abundance at the regional scale

### 4.2.1 Implementation

#### ❖ Mediterranean Sea

This activity was fully oriented towards the preparation of the field operations (macro regional Surveys) and was developed over 2017 and 2018 (until the start of the survey in June 2018). It has led to the scientific, technical and logistical preparation of the aerial and sea campaigns for the Mediterranean Survey planned for the summer of 2018. Numerous actions of consultation, preparation, research and information exchanges took place during this period, notably the regional workshop for the preparation of the ASI which was held in October 2017 in Tunisia and brought together members of the ASI contact group from the Mediterranean area<sup>21</sup>. This event made it possible to identify potential difficulties as well as to validate, modify or complete the information obtained until then by the ACCOBAMS Secretariat for the logistical, technical and administrative aspects of implementing the campaign (permits, flight authorizations, choice of platforms, teams approached, safety certification, etc.). It also allowed a first revision of the draft survey blocks and design, and of the survey Methodology and data collection protocols previously developed by the Scientific Coordinator and his team of experts.

On this basis, all the necessary identified steps were then taken to guarantee the feasibility of monitoring cetaceans throughout the zone, taking into account the constraints, particularities and procedures of each country, in a sensitive geopolitical context.

The logistical and technical preparation took place in a coordinated manner and in consultation with the Steering Committee of the ASI project (validation of the logistical means, monitoring platforms, partners, adaptation of the monitoring coverage rate, budget revisions, calls for tender for airlines, etc.) and with the ASI contact group for the scientific and technical aspects, for capacity building on data collection as well as on their analysis.

The main steps taken in developing this activity are detailed below:

#### **A. DEVELOPMENT OF SCIENTIFIC AND TECHNICAL TOOLS**

##### **a) Selection and contracting of the ASI Scientific Coordinator and associated experts:**

A Call for proposal was released the 15<sup>th</sup> of December 2016. The received applications were reviewed by the ASI Steering Committee and led to the selection of Dr. Simone Panigada proposal, pending some modifications and adds to be made to his proposal. The Scientific Coordinator was contracted early May 2017. Ana Canadas, expert of the Scientific Coordinator *Ad hoc group of experts* (as described in Dr Panigada contract) was also contracted with the specific task to develop the aerial survey design. Ibrahim Benamer, in line with the ASI Steering Committee suggestion was also contracted to support in particular the Scientific Coordination capacity-building related aspects.

##### **b) A detailed review of survey and monitoring operations carried out to date and scheduled to be conducted during the lifecycle of the project; comparative analysis of methods and protocols used, recommendations to improve regional coordination**

Several elements of this action were addressed prior to the actual project Implementation phase, in particular during the pre-project consultation phase with the countries, late 2015.

<sup>21</sup> Report of the ACCOBAMS Survey Initiative Contact Group Regional Workshop in Tunis – 3rd to 5th of October 2017



Other elements were addressed during the project implementation, as part of the Survey preparation in 2017:

- when preparing the ASI Survey methods and protocols, the Scientific Coordinator and his team had to make an assessment and comparative analysis of methods and protocols used;
- during the 2017 ASI Contact Group member consultation phase and the regional Meeting in October 2017, proposed methodology and protocols were reviewed, and where possible, coordination aspects were discussed which provided guidance for subregional collaborations.

### **c) Development of the Mediterranean Sea aerial and boat survey design, methodology and protocols**

The scientific and technical tools were developed by the Scientific Coordinator and the Survey design Expert, with the support of other project partners. In particular PELAGIS Observatory (University of La Rochelle, France) (PELAGIS) and Marine Conservation Research International (MCR), (*NB: Costs related to MCR and Pelagis contribution in this activity were covered respectively under Activity 12 – Coordination, and Activity 5*):

- MCR was identified as a relevant partner to coordinate the ASI boat-based survey component at the end of 2017. Following the decision of the ASI Steering Committee, a contract was signed for the initial preparation and development of ASI Vessel based survey. This included the development of the boat-based survey design and data collection protocols (visual and acoustic surveys);
- PELAGIS also contributed to this activity, in particular by providing and preparing the software SAMMOA and the relevant elements in relation to its use in the survey methodology and protocol tools.

**The scientific and technical tools were also reviewed by the ASI Steering Committee and the aerial survey observers during the Aerial survey training workshops organized just prior to the survey (Cuers, France, May 2018)<sup>22</sup>**

**Importantly: Revisions of the survey designs** and development of alternative scenarios taking account the selected platforms, budgetary and logistical constraints were done all along the preparation phase by the ACCOBAMS Secretariat and the Scientific Coordinator, with support and advice from the ASI Steering Committee. A few examples:

- after identification of pre-selected aerial survey platforms and analyses of their quotations, the decision was taken by the ASI Steering Committee meeting, in January 2018, to reduce the survey coverage from 6 % to 3%. This also allowed the support of the regional boat-based survey component<sup>23</sup>;
- due to research permits related difficulties, the aerial survey design had to be revised several times to optimize the shape of the blocks.;
- the boat-based survey design in the Libyan waters was also adjusted for security reasons, to avoid certain areas of insecurity (ex. Gulf of Sidra).

## **B. REGIONAL CONSULTATION PHASE**

Intensive consultation was conducted by the ACCOBAMS Secretariat with the ASI Contact group to adapt the survey planning (incl. tools, design, logistics, preparation and follow up of permit applications...) to specific local conditions and constraints, before and during the campaign. In addition to bilateral consultations (through emails, phone calls, letters exchanges), the following group consultations were conducted:

- **a sub-regional meeting of the ASI Contact Group Members for the Adriatic region** was organized on June 6<sup>th</sup> 2017<sup>24</sup>, in Roma, Italy, following the identification of a collaborative opportunity for conducting the summer 2018 survey in this sub region. The meeting aimed at supporting the coordination between the Adriatic countries and defining the articulation of the contributions identified so far by the countries. The intention was in the first place to identify

<sup>22</sup>ASI Aerial Observers Training Workshop, Cuers, France – 23-28<sup>th</sup> May 2018 – 47 participants .

<sup>23</sup> Report of the ASI Steering Committee Meeting (Monaco, 10 January 2018).

<sup>24</sup> ASI Adriatic consultation Meeting Report - June 6 2017 ( 9 participants (from Albania, Croatia, Slovenia, Italy, Montenegro)

additional funding or coordinate with other existing survey efforts at national levels. However, in spite of the scenarios envisaged during the meeting, it was not possible to mobilize or make use of the foreseen national funding supports.

- **the regional workshop of the ASI Contact Group members in October 2017** <sup>25</sup>: The ACCOBAMS Secretariat, in collaboration with the UNEP/MAP-SPA/RAC organized a Regional Workshop dedicated to the implementation of the ASI from the 3rd to the 5th of October 2017, in Tunis, Tunisia. This event gathered 33 participants, including ASI Contact Group members and experts from 15 countries of the Mediterranean basin; it allowed ASI involved stakeholders to work together on the preparation and implementation of the survey of 2018. Organized through plenary and working group sessions, this workshop led to review the scientific, technical, administrative and logistical preparation of the Mediterranean synoptic survey campaign of the summer 2018. The few Contact Group members who did not attend the workshop were contacted in parallel through phone meetings, or during physical meetings conducted in the wake of the event.

### C. ADMINISTRATIVE AND LOGISTICAL PREPARATION

Considering that the survey budget had to be built and adjusted according to a wide number of parameters, unknown at the time the preparation started (Survey design final shape, aircraft companies' availability and prices, observers' costs, etc..), a multi-step and living approach was taken, with the continuous support from the ASI Steering Committee.

#### a) Identification, call for tenders and selection of Aerial Companies

A Call for Expression of Interest for aircraft services to conduct aerial surveys<sup>26</sup> was launched in August 2018; 9 proposals were received from different European airplane companies and were reviewed by the ACCOBAMS Secretariat with support from the Scientific Coordinator and from ASI Steering Committee members, on the basis of the offers technical characteristics, geographical coverage proposals and prices in order to start planning the 2018 aerial survey effort and related budget. A negotiation phase followed from November 2017 <sup>27</sup> and led to the final selection and contracting of 4 aircraft companies. The contracts were finalized between April and June 2018<sup>28</sup>.

#### b) Identification and concretization of technical /scientific partnerships for field operations

Considering the number of countries targeted by the survey and the heterogeneities of contexts, it was indispensable for the ACCOBAM Secretariat to develop specific partnerships to support the survey effort, either at the global technical level for the aerial or boat-based components or at national levels for specific support (including administrative). Indeed, some national contexts were particularly complicated and hardly manageable directly and solely by the ACCOBAMS Secretariat. Therefore, several partners were identified and associated collaborations were developed during the preparation phase. Those are listed and described below.<sup>29</sup>

*NB: While the identification and contracting process was conducted as part of this activity, the expenses related to the implementation of the signed partnerships (contracts, MoUs) were imputed to other project activities (in particular Activity 5 – implementation of the survey)*

- **ASI Partners for the boat-based survey component:**

- **Marine Conservation Research Ltd and Marine Conservation Research International:** support for the preparation and development of the ASI ship-based survey component, in charge of the execution of the R/V Song of The whale survey in the Western basin, the Hellenic and Trench and the off shore of Libya<sup>30</sup>, of the team training, supervision

<sup>25</sup> Report of the ACCOBAMS Survey Initiative Contact Group Regional Workshop in Tunis – 3rd to 5th of October 2017.

<sup>26</sup> Call for expression of interest for aircraft services to conduct aerial surveys for cetaceans, large vertebrates and birds in the Mediterranean - summer 2018 – Launched 22/08/2017.

<sup>27</sup> During this phase, several back-and-forth exchanges were done with the companies, following the refining of the survey approach conducted with the ASI Steering Committee. This was the case for example to review the aircrafts companies quotations for a lower survey coverage (3%), or to add/modify their proposed areas of work or to negotiate parts of the costs.

<sup>28</sup> With Action Air; Aerial Banners; Pixair and Grupairmed.

<sup>29</sup> Details of collaboration are described in each partner Contract or MoU.

<sup>30</sup> Addendum to MoU 02/2018, following premature termination and cancellation of Archipelagos Collaboration.

and expert support for the national Boat surveys (Lebanon, Syria, Egypt, Libya) and of the analysis of the visual and acoustic ASI data;

- **Archipelagos Institute of Marine Conservation:** in charge of the execution of the vessel-based survey in the blocks 25 and 26 of the ASI survey design (Libyan offshore waters) with the Archipelagos' Research Vessel Nautilus;

- **CNRS Lebanon:** in charge of the execution of the vessel-based survey in the block 31b (Lebanon territorial waters) of the ASI survey design with the Centre National de Recherche Scientifique du Liban (CNRS) Research Vessel CANA.

- **The Arab Federation For Wildlife Protection (AFWP):** in charge of the execution of the vessel-based survey in the blocks 27 and 28 (Egypt national waters) ASI survey design in coordination with the Egyptian Environmental Affairs Agency (EEAA).

- **UNDP Syria:** Administrative support for the execution of the ASI survey in Syria – Considering the difficulties to establish a direct collaboration and fund transfer to the Syrian Ministry of Local Administration and Environment, UNDP (Office in Damascus) was identified as a relevant intermediary partner to transfer the needed financial support to the Syrian Ministry for the National Action Plan of Syrian Arab Republic for the ASI. UNDP serves also as intermediary to send necessary equipment to the Syrian Scientific teams

- **ASI Partners for the aerial survey component:**

- **Observatory Pelagis (Université de La Rochelle and CNRS ) :** Considering Pelagis extensive experience with cetacean aerial surveys, along with their implication in the ASI Steering Committee together with Agence Française de la Biodiversité, a collaboration was put in place for Pelagis technical support with the ASI aerial survey implementation (including SAMMOA Survey software preparation and follow up during the survey, survey team leader and observers mobilization, training and data pretreatment and analysis)

- **WWF Greece:** The complex situation in Greece in regards with the administrative and security aspects of the survey implementation (research and flight permits, military authorization.) led to establish a collaboration with WWF Greece for their assistance with on-site survey implementation, including permits request and follow up during the mission. Additional support was provided by WWF Greece for HUET training organization in Greece, and research permits for the ASI SOTW Boat based Survey in the Hellenic Trench.

- **Other collaborations**

Other specific collaborations were also conducted with national Institutes without signed agreements. This was the case with Turkish Marine Research Foundation (TUDAV) In Türkiye, the Institut National de Recherche Halieutique (INRH) in Morocco (National staff for the aerial and boat survey on the SOTW) and the Centre National de Recherche et de Développement de la Pêche et de l'Aquaculture (CNRDPA) in Algeria (Support to survey implementation in Algeria - logistics, permits , National Staff for aerial survey and boat based survey on the SOTW).

### **c) Identification and preparation of permits and authorizations**

Considering the number of countries involved in the survey, and therefore the number of different administrative contexts, the mobilization of the ASI Contact Group was fundamental, so that the ACCOBAMS Secretariat had, in addition to its direct ministerial/diplomatic contacts, a vis a vis in each country to help with identifying and conducting the processes to obtain relevant authorizations, either for the aerial or the boat-based surveys.

In most cases:

- the requests to be made at national level concerned research permits;
- the research requests were made by the ACCOBAMS Secretariat for aerial survey;
- MCR made an assessment of all relevant permit request processes and progress, and submitted the necessary requests and follow up for the Song of the Whale Survey, with support from ACCOBAMS;

- aspects related to flight authorizations were managed directly by the aircraft companies;
- there are some standard and straightforward procedure in place for EU countries concerning aerial work;
- for surveys conducted nationally, the National partners were in charge of permits request and obtention (Egypt, Lebanon, Syria).

However, there were in practice many special cases:

- intervention of ACCOBAMS Secretariat or NFP for flying authorizations aspects (Algeria, Greece, Türkiye, Malta);
- in a few cases, originally sought authorizations for aerial surveys could not be obtained (e.g., in Egypt, Libya, Morocco and Syria airspaces) and alternative types of platforms were mobilized (international or national boats);
- security situations or national restrictions also led the ACCOBAMS Secretariat to adjust the choice of monitoring platforms in certain areas;
- security situations or local restrictions conducted to cancel acoustic surveys aboard Song Of the Whales in some segment of the survey transects;

This process led to obtaining permits to conduct the work in most of the intended areas of work, even in some cases with consequent delay;<sup>31</sup>

#### **d) identification of the survey Teams (observers and team leaders)**

The teams were set up in different ways depending on the type of survey, but with the view of ensuring the participation of scientists and experts from almost all the involved countries

- **For the aerial survey:**

Considering the specific skills required to conduct the aerial survey work, the potential pool of experienced observers from the region was relatively limited and the choice was made to proceed with direct identification of potential observers. A first list of potential team leaders and experienced observers was made, based on the knowledge of the Scientific Coordinator, Pelagis partner and the ASI Steering Committee. In a capacity building perspective, the list was completed by non-experienced observers, who were identified based on the feedback received previously from the ASI Contract Group members.<sup>32</sup> In addition, scientists from the Black Sea participated in the survey which allowed them to reinforce their skills in the view of their leadership role for the future Black Sea survey.

Teams were built on the following basis: an experienced team leader, an experienced observer and a non-experienced observer, with at least one person from the survey area concerned, in order to facilitate the implementation of the survey the team daily life (logistics, language, formalities...).

Direct contact was made by the ACCOBAMS Secretariat with all pre identified team leaders or observers and contracts were finalized and signed prior the start of the survey<sup>33</sup>. The number of observers and team leaders salaries (or of the allowance provided as a mission compensation) were agreed upon, within the ASI Steering Committee (on the basis of PELAGIS experience in particular)<sup>34</sup>.

Some observers were kept as back-up options, in case some last-minute changes and emergencies would arise, to make sure that the monitoring programme would continue without interruptions. Indeed, the survey work had to be prolonged beyond the planned period in specific areas and additional short contracts were made to mobilize again available observers or team leaders. **25 contracts were signed**. Several other observers or team leaders were mobilized as in-kind support from their national organization/institute and they received mission allowances.

---

<sup>31</sup> For example in the Aegean Sea sector, the necessary authorizations were difficult to obtain and led to several weeks of delay to conduct the surveys in several Survey blocks.

<sup>32</sup> Consultation during the ACCOBAMS Survey Initiative Contact Group Regional Workshop in Tunis – 3rd to 5th of October 2017.

<sup>33</sup> The teams started at different dates, depending on the areas, weather conditions and permit obtentions.

<sup>34</sup> Report of the Steering Committee meeting of the 10<sup>th</sup> of January 2018, Monaco.

- **For the Naftilos boat survey**

The core team of the Naftilos was recruited by Archipelagos Institute of Marine Conservation (Skipper, crew, additional observer). An acoustic expert was recruited by MCR to work as the team leader. This specific survey was targeting the offshore Libyan waters and therefore a Libyan team of 3 observers was constituted by the ASI Contact Member/ NFP in Libya.

- **For the SOTW Boat Based survey**

The core team of the Song of the whale was recruited by MCR (sailing crew, skipper, MCR scientists and team leaders). The Song of the Whale was particularly suited to host non experienced observers who would be trained on board and applied the ASI survey scientific visual and acoustic methods and protocols. It was possible to take 5 ACCOBAMS observers on board the SOTW to participate in the work of the MCR team. A rotation of teams was set up between each port of call of the SOTW to optimize the participation of a larger number of observers.

The ACCOBAMS Secretariat made several consultations to the NFPs to identify national observers to board during each segment of the SOTW journey. Scientists from the countries in which the SOTW was going to carry out its survey were targeted, with priority given to scientists from southern countries or European students who would benefit the most from the field work experience. Additional specific requests from observers from the region were also accepted. In total 33 observers participated to the SOTW survey (9 females, 24 males) from 10 countries. – See detail in Activity 5.

- **For the national Boat Based surveys:**

Each national boat survey being organized by the concerned country partner (*i.e.* In Lebanon, Syria, Egypt), the national team were identified/selected by the ASI boat survey responsible entity/partner.

#### **e) Field work organization**

For the aerial Survey, the team leaders were in charge of the organization of the daily life of their team, including finding accommodation and paying team expenses (meals, transport.).

To facilitate the logistics on the field and provide the necessary flexibility, the ACCOBAMS Secretariat put in place a system of international prepaid credit cards. Each team leader was provided with one credit card, which was refilled as necessary by the ACCOBAMS Secretariat.

The Boat based team life was directly organized and handled by the partnering organization in charge of the survey (MCR, Archipelagos or National partners).

#### **f) Identification and purchasing of equipment**

The necessary aerial survey equipment was identified and listed by the Scientific coordinator during the preparation phase. Several sets of equipment (field laptops, etc..) were loaned by ASI technical partners (ex. Pelagis) and a sponsorship from PANASONIC led to the loan of 2 additional laptops. The missing additional small equipment was purchased by the Secretariat. (ex. clinometers, soundcards, microphones, etc.). As a result, the budget needed for the equipment was much lower than anticipated (*see lessons learnt*).

The MCR Song of the Whale was fully equipped, as it was originally conceived for such surveys. The Naftilos research vessel had to be upgraded to reach the needed standard for completing the acoustic survey (ex. A towed array / hydrophone was purchased). Such costs were handled directly by the Archipelagos with technical advice from MCR.

In Syria, some equipment was purchased by ACCOBAMS Secretariat (ex. lifejackets, binoculars, cameras, laptop...) and sent to the teams through the collaboration with UNDP.

In Egypt, the two identified boats <sup>35</sup> had to be upgraded consequently to reach the required security and comfort standard for conducting the boat surveys. This was done at the national level, with the budget granted by the ACCOBAMS within the collaboration with AFWP.

## ❖ Black Sea

The preparation phase of the survey took place between January and June 2019. Conducted by the Secretariat of ACCOBAMS and Mare Nostrum (CeNoBS Project Leader) it built on the previous experience and knowledge from the ASI Mediterranean Sea survey (ex. the same Scientific Coordinator was selected, Mediterranean documents and material were adapted - *Survey protocol/methods, working documents for call for tenders, etc...* -, the selected survey team leaders and several observers had benefited previously from the Mediterranean survey training and experience). This 6-month intensive survey preparation phase allowed to fine tune the Survey protocol and transects design while putting in place all the necessary conditions for the good implementation of the survey: aircraft company selection and contracting, permits and authorization requests, teams selection and training, communication tools.

In parallel, the ACCOBAMS Secretariat developed a collaboration with Russian Scientific Organizations in order to conduct a survey over part of the Russian waters, following the same approach and methods than the ASI/CeNoBS survey in order to allow the comparison/merging of the two datasets.

The main actions and outputs issued from this activity are listed below:

### A. DEVELOPMENT OF SCIENTIFIC AND TECHNICAL TOOLS

#### a) Selection and contracting of the ASI Scientific Coordinator and associated experts:

Building on the ASI experience in the Mediterranean region, and in accordance with the CeNoBS budget, direct contracts were made with the ASI Scientific Coordinator who previously worked for the ASI in the Mediterranean region.

An additional expert (from EcoOcean Institute) was also contracted by ACCOBAMS to assist with the Scientific Coordination of the survey, specifically to ensure data verification and validation along the survey work, to provide training on the dedicated survey software SAMMOA and to conduct pre-treatment of the data collected during the survey (data verification, data cleaning, and data extracting) in view of the analysis.

#### b) Development of the Black Sea aerial survey design, methodology and protocols

The data collection protocols and the survey design were prepared by the Scientific Coordinator and the Design Survey Expert, in close collaboration and consultation with scientists from Mare Nostrum and Green Balkans and the other CeNoBS project partners. To build on the 2018 survey experience in the Mediterranean region, and to ensure harmonization and coherence at the macro regional scientific level, the existing tools developed for the Med survey were used and adapted to the Black Sea survey context.

The Survey design was built taking into account lessons learnt from the Med (ex. Use Flight Information Regions to shape the blocks to facilitate permit request). The revisions of the Survey designs were made mainly to adapt to aerial constraints, including unauthorized areas (Crimea, FIR of Russia)

### B. ADMINISTRATIVE AND LOGISTICAL PREPARATION

#### a) Identification, call for tenders and selection of Aerial Companies

Those procedures were conducted by Mare Nostrum with assistance from the ACCOBAMS Secretariat<sup>36</sup>

<sup>35</sup> There were major difficulties to identify boats that would be suitable to conduct the survey)

<sup>36</sup> The process for contracting aerial companies in the Black Sea largely built on the ASI Mediterranean experience (documents, contacts, budget development..)

The previous templates used by the ACCOBAMS Secretariat for the Mediterranean region (ex. Calls for Expression of Interest, selection grids, contracts with aircraft companies...) were used as models to develop the Black Sea survey administrative documents.

A call for Expression of Interest was opened by Mare Nostrum mid-January 2019, and relayed to aircraft companies that participated in the Med Survey. Using information received by interested companies to refine the technical specification and expected work and conditions details, a Call for Tender was developed and launched<sup>37</sup> by Mare Nostrum in March in lines with the rules set up for EU funded project. The selection was made by Mare Nostrum with support from ACCOBAMS and the Scientific coordinator. The selection was made on the basis of the selection criteria agreed upon beforehand and following a round of back and forth with aircraft companies to clarify some key points. The offer from the aircraft company Action Air was selected.

#### **b) Identification and preparation of all necessary permit requests by country for aerial surveys**

The administrative preparation was conducted under the coordination of Mare Nostrum and ACCOBAMS. This included the preparation of request for Permits and authorizations and the follow up with national relevant authorities. National partners involved in the aerial survey were supporting the whole process. Due to the previous ASI Mediterranean experience and lessons learnt, the ACCOBAMS Secretariat prepared and submitted directly the permit request in Türkiye. The selected aerial company also had extensive experience in Türkiye which facilitated the aerial authorization processes.

#### **c) identification of the survey Teams and team life organization**

The selection of the two teams was done in a concerted manner within the CeNoBS project consortium. The choice of the 2 team leaders was obvious, due to their experience as observer and team leader during the ASI survey in the Mediterranean in 2018. The observers were chosen among the CeNoBS project partners. The same approach as in the Mediterranean was taken, with at least one team member from the country being surveyed. (in order to facilitate the work locally and according to the request of some countries - ex Türkiye).

Observers and team leaders were contracted by Mare Nostrum, who also organized and handled the organisation of daily life logistics of the teams.

#### **d) identification of equipment needs and purchasing necessary equipment's**

Two laptops and sets of equipment were loaned for the survey by the Scientific Coordinator, ACCOBAMS<sup>38</sup> and from PANASONIC who agreed to loan the fieldwork laptop once again. Security equipment was provided by the aerial company.

### **C. ADDITIONAL COLLABORATION WITH RUSSIAN PAR FOR EXTENDING THE SURVEY**

Following the CeNoBS project confirmation at the end of 2018, the ACCOBAMS Secretariat started to work on identifying Russian Scientific partners with whom to build a collaboration to complete the CeNoBS aerial survey by extending the effort over Russian waters. Exchanges with UNDP EMBLAS+ coordination unit in Istanbul<sup>39</sup> and participation to EMBLAS+ Inception workshop<sup>40</sup> led the Secretariat to start a collaboration with Russian Scientists from the State Oceanographic Institute and A.N. Severtsov Institute of the Ecology and Evolution, Russian Academy of Sciences. Between February and September 2019, technical and scientific exchanges with Researchers from the State Oceanographic Institute, with the support of the ASI/CeNoBS Scientific coordinator, led to the identification of a suitable survey plane, and to ensure the harmonization with the ASI/CeNoBS survey protocols and methods (including

<sup>37</sup> Call for Tender: Aircraft services to conduct aerial survey in Black Sea for cetaceans (D1) and associated marine life in summer 2019 (June-August) - In the frame of CeNoBS project and ACCOBAMS Survey Initiative

<sup>38</sup> equipment purchased for the Mediterranean survey

<sup>39</sup> UNDP Regional Bureau for Europe and the CIS

<sup>40</sup> EMBLAS-Plus Inception Workshop / Istanbul 21-22 Feb 2019

set up of the data collection software VOR). In this perspective, a Russian scientist from Moscow State University was also invited and participated to the CeNoBS aerial survey training workshop in June 2019.

A MoU of Collaboration with Cleans Seas International Ecological Fund, the Russian Academy of Sciences and Federal State Budgetary Institution and N.N. Zubov's State Oceanographic Institute was prepared from June 2019 and signed in September. A contract was signed in July 2019 with Navicharter LLC, in charge of the survey implementation (including aircraft mobilization).

In parallel, Russian scientific partners succeeded in obtaining an additional co funding support from the EMBLAS+ project. direct collaboration). The Permit and authorization processes were handled directly by the Russian survey partners but consequent delay in obtaining the necessary permissions finally led to postpone the survey until September instead of July.

#### **4.2.2 Results/outcomes**

##### **❖ Mediterranean Sea**

➤ **a standardized operational method for inventorying and monitoring the species studied, at the macro-regional level, including:**

- **Aerial survey and boat-based visual and acoustic data collection protocols**, targeting cetaceans, mega fauna (sea turtles, sea birds, elasmobranchs, fish...) and human activities and impact (boats, floating marine litter...)

- **SAMMOA<sup>41</sup> software guidance for aerial data collection<sup>42</sup> :** )

- **ASI Mediterranean aerial and boat-based survey blocks and design**

➤ **Completed administrative procedures:**

All aerial and/or boat-based survey necessary permits and authorizations were requested and obtained in **19** countries in 2018 and in **2** countries in 2019.

➤ **Completed logistical organization:**

The details of the survey organization were finalized for aerial and boat-based surveys in 2018 and are described in the ASI Mediterranean technical report<sup>43</sup>. The organization of the survey in Egypt and Syria was finalized in 2019. The main elements of the logistical organization are the following:

- ASI Scientific Coordinator contracted for supervising the aerial survey;
- ASI Boat based survey Coordinator (MCR) for survey preparation, training and advice to national teams;
- Survey platforms identified: 4 contracts with aircraft companies (8 planes mobilized) and 5 MoUs were signed for boat surveys with MCR, Archipelagos, AFWP, CNRS Lebanon, UNDP in Syria ( 6 boats in total);
- 30 aerial observers and 10 team leaders were identified and confirmed;
- 33 boat-based survey observers were identified and confirmed for the MCR SOTW;
- 3 observers and one team leader were identified and confirmed for the Naftilos Survey (offshore Libya) ;
- National boat survey teams identified *and trained*<sup>44</sup> in 3 countries: Lebanon (in 2018), in Syria and Egypt ( in 2019);
- 14 collaborations were signed with survey partners
- all necessary survey equipment was loaned or purchased.

<sup>41</sup> <https://www.observatoire-pelagis.cnrs.fr/publications/les-outils/article/logiciel-sammoa>

<sup>42</sup> Methods , protocols and design are described in the Technical Report of the Survey - MOP7.Inf33\_ASI Technical Reports

<sup>43</sup> MOP7.Inf33\_ASI Technical Reports

<sup>44</sup> *Boat survey Training workshop was conducted as part and with budget of the activity 5 (survey implementation) and 9 (capacity-building)*



## ❖ Black Sea

- **A Black Sea adapted ASI standardized operational method for inventorying and monitoring the species studied, at the macro-regional level<sub>2</sub> including:**

- **Aerial survey data collection protocols**, targeting cetaceans, mega fauna (sea birds, elasmobranchs, fish.) and human activities and impact (boats, floating marine litter...)

- **SAMMOA<sup>45</sup> software ready and guidance for aerial data collection<sup>46</sup>**

- **Black Sea aerial survey blocks and design completed**

- **Completed administrative procedures:**

The permits and authorizations were requested and obtained in all Black Sea countries (**6**) countries

- **Completed logistical organization with:**

The details of the survey organization were finalized for aerial and boat-based surveys in June 2019, and are described in the ASI Black Sea technical report<sup>47</sup>:

- ASI Scientific Coordinator contracted for supervising the aerial survey;
- Expert contracted to supervise data verification and SAMMOA use;
- Survey platforms identified: 1 contract with one aircraft company (2 planes mobilized) and 1 MoU and 1 contract were signed for Russian Aerial survey (1 plane);
- aerial observers and team leaders were identified and confirmed for CeNoBS survey
- Russian team was set up
- All survey teams were trained;
- all necessary survey equipment was loaned or purchased.

<sup>45</sup> <https://www.observatoire-pelagis.cnrs.fr/publications/les-outils/article/logiciel-sammoa>

<sup>46</sup> Methods , protocols and design are described in the Technical Report of the Survey - MOP7.Inf33\_ASI Technical Reports

<sup>47</sup> MOP7.Inf33\_ASI Technical Reports

### 4.3. ACTIVITY 2 – SURVEY IMPLEMENTATION

Reference	Activity description
Action Plan (2017)	Activity 2 - implementation of the survey coordinated by geographic sector conducted using the standardized method with a view to establishing a baseline status at the macroregional level
CeNoBS (2019)	Activity 2.2: Assessment of cetacean populations distribution and abundance at the regional scale

#### 4.3.1 Implementation

##### ❖ Mediterranean Sea

The ASI Data collection in the Mediterranean Sea was concentrated during the summer of 2018, from May to September, by using the standardized method and protocols developed for the survey. The aerial and boat-based survey components were conducted in parallel, with the mobilization of 8 planes and 3 different research boats with over 100 technicians and researchers involved.

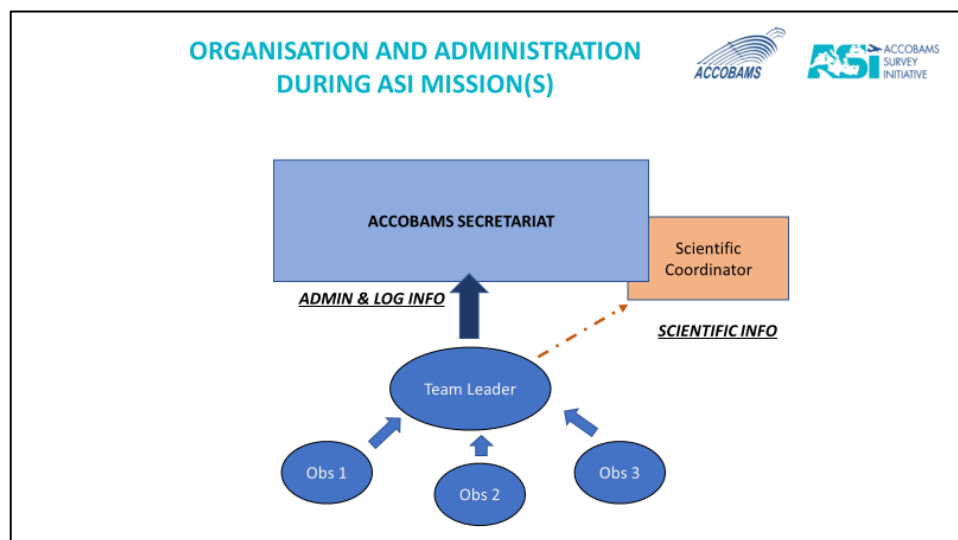
Aerial surveys were conducted over approx. 75% of the targeted area. This effort was complemented by boat-based visual and/or acoustic surveys, to monitor waters where it was not possible to use dedicated airplanes and to collect data on deep diving species, such as beaked and sperm whales.

ASI Data collection was mainly conducted at the same time during the summer 2018, in order to allow a synoptic coverage of the entire Mediterranean Sea. However, due to complex political and security situations, a few areas could be surveyed only in 2019: ASI boat-based national surveys were conducted in August 2019 in Syrian coastal waters and in Egyptian waters in October 2019.

The details of the implementation of the ASI Survey are described within the Technical reports of the ASI survey<sup>48</sup>. The main actions implemented within this activity are detailed below, for each survey component:

##### ➤ AERIAL SURVEY COMPONENT

Under the supervision of the ACCOBAMS Secretariat and the Scientific Coordinator, the ASI aerial survey took place from June to August 2018 with 8 aircraft and 40 observers, with the assistance of PELAGIS for the monitoring of the use of the SAMMOA software. The aerial survey coordination scheme is shown on Figure 5. The aerial survey lasted in total 3,5 months. The first survey flight was made on June 6th and the last team completed the last flight on August 20th 2018. Nearly all the planned transects were covered. (See results below)



*Organization and administration during the ASI aerial missions*

<sup>48</sup> MOP7.Inf33\_ASI Technical Reports

- **ACCOBAMS Secretariat role**

The ACCOBAMS Secretariat was available 7/7days and 24/24hours during the whole survey duration to support and assist the teams as needed, with all aspects: logistics, administrative, security in order to ensure the good implementation of all operations.

In particular, the ACCOBAMS Secretariat supervised the budget aspects of the aerial survey fieldwork, booked all flights for the teams, assisted with booking of hotels when needed, identified and sent additional observers for the SOTW survey, recruited additional team members where needed, followed up with pending research permits requests, sent relevant documents to authorities (e.g.: in Greece with the Army), send equipment where/when needed, developed communication tools, attend to events, liaise with the ASI Steering Committee as needed, follow up with collaborations issues (e.g.: Archipelagos) and find solutions, etc.

- **Scientific Coordinator role**

The Scientific Coordinator provided support to the aerial survey team leaders during the whole survey period for all scientific related matters: decisions to take for flying or not flying, weather conditions, doubts on observations, validate strategic choices of team leaders when necessary;

He was also mobilized to replace a team leader in Greece for a week and attended several ASI events and ASI Steering Committees meeting and exchanges (Malaga, Monaco).

- **PELAGIS role**

As per the agreement that was signed with PELAGIS technical support for the ASI aerial survey included the following aspects:

- SAMMOA survey software preparation;
- training of the teams with SAMMOA;
- assistance to the teams during the Survey for SAMMOA survey software;
- mobilization of team leaders and observers to implement the survey
- data check and validation, as well as pretreatment of the data received from all teams

- **Survey Teams work**

All the teams involved in the aerial monitoring participated to the Aerial survey training workshop that was organized in Cuers, France at the end of May. They attended both theoretical and practical lessons, for familiarization and preparation for field work activities. This workshop is further described in the ASI technical Report and in the Activity 9 of the present report – (capacity building).

10 teams were set up at the beginning of the survey. While most of the Areas were covered within the planned period, several observers or team leaders were mobilized twice, sometimes at the last moment, to complete teams or rotate with previous teams' members, in order to cover the missing areas where significant delays had been encountered. (Aegean Sea, south of Crete/Levantine Sea zone).

Each team leader was in charge of organization the daily life of his/her team (finding accommodation, organizing local transport, etc.) A budget was set up for each team prior to the survey, adapted according to the areas of work, and team leaders reported regularly to the ACCOBAMS Secretariat on all their expenses, which also allowed the secretariat to refill their credit cards as necessary. In general, the budget allocated to the teams was not fully used.

## ➤ **BOAT-BASED SURVEY COMPONENT**

- **MCR – SOTW survey**

As per the signed MoU for the execution of the ASI Vessel based survey *component*, MCR assisted the ACCOBAMS Secretariat and provided guidance with coordination and execution of all vessel surveys (Naftilos of Archipelagos, Cana of CNRS Lebanon, Syrian boat and Egyptian boats) in addition to undertaking visual and acoustic vessel surveys of various blocks of the Mediterranean basin using the R/V Song of the Whale.

The research vessel SOTW carried out its acoustic and visual monitoring work from the end of May to August 2018 in the entire western basin. Due to the failure of the survey conducted by Archipelagos, MCR agreed to extend the SOTW survey to the blocks 25 and 26, off the coast of Libya. They also went back to offshore Algerian waters (Blocks 3 and 6), since those areas could be surveyed entirely during the first passage, due to permit and timing issues.

Throughout the campaign, the Song of the Whale welcomed on board some thirty scientists from 10 Mediterranean countries who were trained in the practice of and performed acoustic and visual monitoring.

MCR also trained the National team leaders of Egypt, Syria, Lebanon and Libya to the visual data collection method/protocol and the use of related software; MCR provided advice and guidance to the teams before and during the national surveys and checked the data received from the national teams.

- **Naftilos Survey**

As per the signed MoU for the execution of the ASI Vessel based survey, Archipelagos prepared and mobilized their research vessel Naftilos to conduct the survey in Blocks 25 and 26 (off shore Libyan waters) The survey was conducted between July 1st and 24th 2018. The partnership with Archipelagos for the use of the boat Naftilos to survey the waters of Libya, proved to be defective and had to be stopped (see above lessons learnt) The area was finally covered by the SOTW.

- **Lebanon**

The CNRS Lebanon's boat Cana travelled the Lebanese coastal area, within 12 nautical miles, between August 7th and September 11<sup>th</sup> 2018.

- **Egypt**

The Egyptian waters (Blocks 27 and 28) were surveyed by the Egypt National teams onboard two boats? from the 15th of October 2019 to the 4th of November;

- **Syria**

The Syrian coast waters within 12 nautical miles were surveyed by the Syrian National team, between 7<sup>th</sup> of July 2019 and 8<sup>th</sup> of August 2018.

## ❖ **Black Sea**

The Black Sea aerial survey was conducted through:

- CeNoBS aerial survey in June and July 2019 and covered the waters of Romania, Bulgaria, Türkiye, Ukraine and Georgia, both territorial waters and exclusive economic zones, following the pre-defined transect lines of the survey design. It allowed to collecting visual observations of cetaceans following the specific and shared ASI/CeNoBS protocols in order to assess their abundance and distribution;
- an aerial cetacean survey conducted by Russian Scientists in the context of a collaboration with ACCOBAMS. The Russian teams covered the survey block over Russian waters, in the northeastern part of the Black Sea in September 2019.

The aerial survey was conducted between June 17th and July 4th, 2019, using 2 small planes; 2 teams were mobilized, one per plane, composed of one team leader and two observers each. In addition to the observation work, the team leader fulfilled the specific task of coordinating the flight planning with the pilot and organizing the logistics of the team. The research teams were mixed, involving observers with experience in aerial surveys and observers that have been trained for their first aerial survey, thus implementing the capacity building component of the project. The teams also had mixed representation in terms of participating countries, involving scientists from Romania, Bulgaria, Türkiye and Ukraine.

Both teams worked under the supervision of the Scientific Coordinator who was in charge of the different phases before the field work, as well as of the regular monitoring of the implementation of the aerial surveys, to ensure appropriate use of the methodology, providing guidance and advice to the team leaders in their flight planning. The survey coordinator was also in charge of training the teams on the line transect methodology and data collection protocols.

An additional expert from the EcoOcean Institute was contracted by ACCOBAMS to assist with the scientific coordination of the survey, specifically to ensure data verification and validation along the survey work, to provide training on the dedicated survey software SAMMOA and to conduct pre-treatment of the data collected during the survey (e.g.: data verification, data cleaning, and data extracting) in view of the analysis.

A dedicated training workshop was organized in Tulcea, Romania, 13- 15 June 2019, where all the teams involved in the aerial monitoring attended both theoretical and practical lessons, for familiarization and preparation for field work activities before starting the survey. With ACCOBAMS financial support, one representative from Georgia and one from Russia participated in the training in order to increase the regional capacity.

### **Russian survey**

The collaboration set up by ACCOBAMS with Russian Scientific Organizations led to the implementation of the collection of data on cetaceans during an aerial survey over part of the Russian waters<sup>49</sup> in September 2019, following the same approach and methods than the ASI/CeNoBS surveys.

#### **4.3.2 Results/outcomes**

##### **❖ Mediterranean Sea**

- **Datasets of raw observations and acoustic data collected on cetaceans, marine megafauna and human activities and impact through ASI aerial and boat based synoptic Surveys conducted throughout the Mediterranean Sea, as follows:**
  - Datasets of observations collected by plane in 75% of the Mediterranean from June to August 2018 with 8 planes and 40 observers.
  - Visual and acoustic data collected by boat with the R/V SOTW in the entire West basin, southern Greece, offshore of Libya, from 28th May to 29th September 2018
  - Visual data collected by boat in the territorial waters of Lebanon on Cana Research boat between August 7<sup>th</sup> and September 11<sup>th</sup> 2018
  - Visual data collected in Syria on the Jawharat Almohit Research Boat -(boat survey, from 28/07/2019 to 8/08/2019)
  - Visual Data collected by boat in Egypt in September and October 2019
- **Photos from the MCR SOTW Survey and Aerial survey observers and team leaders**
- **ASI team leaders and observers Mission reports on the implementation of the survey**

<sup>49</sup> Aerial survey of cetaceans in Russian waters of the northeastern Black Sea from the Adler district of Sochi to the midline of the Kerch Strait (Krasnodar Krai)

➤ **Over 130 team leaders and observers mobilised (and trained)**

- 40 team leaders and observers trained during ASI Aerial survey Training workshop (Cuers, may 2018)
- HUET - Helicopter Underwater Escape Safety Training organised in France (9 persons), Croatia (3 persons), Romania (5 persons) and Italy (7 persons)
- team leader team leaders from Egypt, Lebanon, Syria and Libya trained during the ASI Boat survey training workshop (Samos, Greece, June 2018)
- National trainings organised in Egypt, Lebanon and Syria (with support from trained team leaders)<sup>50</sup>
- 10 team leaders and 30 observers for aerial survey
- 92 team leaders and observers for boat-based surveys (SOTW, Lebanon, Syria, Egypt and Naftilos)

❖ **Black Sea**

➤ **Data collected on cetaceans, marine megafauna and human activities and impact through ASI/CeNoBS aerial synoptic Surveys conducted in the Black Sea as follows:**

- Data collected by plane in Ukraine, Romania, Bulgaria, Turkey and Georgia from June to August 2018<sup>51</sup>
- Data collected by plane over the Russian water from 22/09/19 to 24/09/19

➤ **3 planes mobilized (2 for the CeNoBS survey and 1 for the Russian Survey)**

➤ **13 observers and team leaders mobilised**

❖ **Outputs:**

- Technical report of the ASI Mediterranean Survey and of the ASI/CeNOBS Black Sea Survey<sup>52</sup>
- Aerial survey data collection Protocols, including SAMMOA guidance
- ASI Mediterranean Data base with: aerial survey dataset, SOTW visual and acoustic data sets, Egyptian survey visual Dataset, Lebanon visual dataset, Syria survey visual Data sets.
- ASI Black Sea Data base with: CeNoBS aerial survey dataset and Russian Survey Dataset.

#### 4.4. ACTIVITY 3 – DATA MANAGEMENT SYSTEM

Reference	Activity description
Action Plan (2017)	Activity 3 - Pre-planning study for an information management system for data collected during the survey and in the medium and long term.
CeNoBS (2019)	NA

##### 4.4.1 Implementation

A call for proposal was launched in July 2017 aiming to develop an information management system for cetaceans survey data, considering the data collected in the context of the ACCOBAMS Survey Initiative project and perspectives for the medium and long terms. The selected consultant SINAY finalized in 2018 a “*Preparatory study for an information*

<sup>50</sup> Described in the Reports of ASI survey in Syria, Egypt and Lebanon.

<sup>51</sup> CeNoBS Progress report 1.

<sup>52</sup> MOP7.Inf33\_ASI Technical Reports

*management system for cetacean survey data in the ACCOBAMS Agreement area*”, that was presented to the ASI Steering Committee meeting of December 2018<sup>53</sup>.

Based on the results and recommendations of this study, the ASI data sharing policy and terms of use was then developed by the ACCOBAMS Secretariat and the ASI Steering Committee<sup>54</sup>. The ASI data sharing policy and terms of use were circulated to ACCOBAMS NFPs and ASI Contact Group Members in July 2019. SINAY study and ASI data sharing policy and terms of use were presented at the MoP7 in November 2019<sup>55</sup>.

In accordance with this study conclusions and recommendations, the ACCOBAMS Secretariat developed during the summer 2019 an online basic system on the ACCOBAMS Website to make part of the ASI data downloadable on line, upon filling a form and acceptance of the ASI Terms of Use. This tool is operational since November 2019.

In parallel, a procedure for addressing the requests for the complete sets of data was defined and applicated from 2019: each data requester needs to filled in a template (*that was prepared by the ASI Steering committee and Secretariat*), which is then reviewed by the ASI Steering Committee for approval. The data is provided to the requester after his validation of the ASI data ToUs. This procedure will remain in place until the end of the ASI Project.

The data from the Black Sea Survey was also put online at the end of CeNoBS project on the ACCOBAMS website as well as on other data platform (e.g.: EMODnet) and the ASI Terms of Use were be updated consequently.

#### **4.4.2 Results/outcomes**

- **A detailed study for an ASI information management system<sup>56</sup>;**
- **An ASI data management system defined and operational (access to datasets on [the ACCOBAMS Website](#) )**
- **An ASI data policy and Terms of Use<sup>57</sup>;**
- **A procedure in place for reviewing the complete sets of data requests (each request holder needed to complete a data request form that was reviewed by the ASI Steering Committee before sharing of the data)**
- **ASI results related maps were also uploaded on NETCCOBAMS for visualisation purposes**

---

<sup>53</sup> ASI Steering Committee report of December 20<sup>th</sup> 2018.

<sup>54</sup> ASI Steering Committee report of January 25<sup>th</sup> 2019.

<sup>55</sup> MOP7.Inf13\_ASI Data Policy.

<sup>56</sup> MOP7.Inf12\_Preparatory study for an IMS for cetacean survey data in the ACCOBAMS area.

<sup>57</sup> Contract 23/2017.

#### 4.5. ACTIVITY 4 - DRONES

Reference	Activity description
Action Plan (2017)	Activity 4 Using drones to monitor marine mammals

##### 4.5.1 Implementation

This activity was added to the ASI Project following a request from the Foundation Prince Albert 2 which conditioned their financial support. Out of the 400 000 Euros requested originally for the ASI, the FPA2 agreed to support the project up to 100 000 euros, of which 30 000 euros would be allocated to an activity dedicated to exploring the potential for the use of UAVs to monitor marine macro fauna, with a view to experimentation in the field.

This activity is described in the FPA2 project description as Activity 4- Exploring the potential for the use of UAVs to monitor marine macro fauna, with a view to experimentation in the field.

Expected Results:

- R 4a - an inventory of technological advances in aerial monitoring by UAV, including a market study and a desk review of the relevant legislation, applicable to civil use for the scientific monitoring of marine fauna in the ACCOBAMS area (or part of it);
- R 4b - Carrying out experimental aerial monitoring of cetaceans by drone and feedback, particularly in the context of the ASI.

Indicators:

- 4: Study of feasibility of the use of drones;
- I4a-b: report of experience on drone and analysis of data.

The ACCOBAMS Secretariat launched a call for proposal related to the use of drones to monitor cetaceans in the ACCOBAMS area in April 2018<sup>58</sup>. Out of the 9 received proposals, the ACCOBAMS Secretariat identified a strong potential of collaboration between the two first ranked proposals<sup>59</sup>. After exchanges with the concerned teams and an increase of the available budget (see planned/used budget), the project '*Feasibility study and experimentation on the use of drones for cetacean monitoring in the ACCOBAMS Agreement Area*' developed by Israel Marine Mammal Research and Assistance Center (IMMRAC) and Morris Kahn Marine Research Station (MKMRS) / University of Haifa, in collaboration with Murdoch University (Australia) was selected. This project started to be implemented in 2019, the first results were presented during the ASI Special Event before the MoP7 of ACCOBAMS in Istanbul, Türkiye, and the final studies and reports were finalized in 2021.

##### 4.5.2 Results/outcomes

- a study on the potential use of drones for megafauna monitoring in the ACCOBAMS agreement area<sup>60</sup>;
- a publication report on the drone experimentation conducted by IMMRAC/University of Haifa "*Automated detection of dolphins in imagery from unmanned Aerial vehicles and performance optimization: Deep-learning in animal abundance surveys*"<sup>61</sup>.
- a peer reviewed publication in the journal *Remote Sensing*<sup>62</sup>

<sup>58</sup> Call for proposals launched on April 10<sup>th</sup> 2018 ("ACCOBAMS Survey Initiative" Feasibility study and experimentation on the use of drones for Cetaceans monitoring in the ACCOBAMS Agreement area).

<sup>59</sup> IMMRAC and Murdoch University proposals' ranked first, with both having a strong expertise in UAV use for monitoring marine fauna. IMMRAC proposal in particular includes a long ranged Drone experimentation to be assessed against the ASI survey conducted in Israel, as well as the use of their automatic, deep-learning algorithm able to detect and classify marine organisms in underwater and aerial videos. Murdoch University benefited from an advanced knowledge and was conducting a study desktop analysis on the potential use of drone for megafauna monitoring.

<sup>60</sup> Hodgson, A.J., Cleguer, C., Scheinin, A., Bigal, E., and Galili, O. (2020) Potential use of Unmanned Aerial Vehicles for megafauna monitoring in the ACCOBAMS Agreement Area: transitioning to the new technology. A report prepared for ACCOBAMS Secretariat, June 2020.

<sup>61</sup> Bigal and al. - Automated detection of dolphins in imagery from unmanned Aerial vehicles and performance optimization – Deep-learning in animal abundance surveys.

<sup>62</sup> Bigal, E.; Galili, O.; van Rijn, I.; Rosso, M.; Cleguer, C.; Hodgson, A.; Scheinin, A.; Tchernov, D. Reduction of Species Identification Errors in Surveys of Marine Wildlife Abundance Utilising Unoccupied Aerial Vehicles (UAVs). *Remote Sens.* 2022, 14, 4118. <https://doi.org/10.3390/rs14164118>



#### 4.6. ACTIVITY 5-ANALYSIS

Reference	Activity description
Action Plan (2017)	Activity 5 - analysis of the results of the survey (abundance and distribution of species), and establishing links with the main anthropogenic pressures and protection measures, including national/regional measure
CeNoBS (2019)	Activity 2.2: Assessment of cetacean populations distribution and abundance at the regional scale

##### 4.6.1 Implementation

###### ❖ Mediterranean Sea

The validated approach for this activity which is conducted together with activity 7, proposed an optimal data analysis strategy for the data arising from the ASI that would provide (a) the most robust estimates possible for use in conservation and management; and (b) expand the analytical capacity throughout the ACCOBAMS region.

The analysis of the ASI data was done by a group of contracted experts and an *ad hoc support team* which was the same as for the ASI Scientific Coordination, but also following a participatory approach, reflecting the collaborative nature of the ASI project, that involves scientists from each country, engaged in learning and applying analytical aspects. Three data analysis sub-regional workshops were planned with both theoretical and practical sessions, during which participants would have the chance to individually prepare the data for abundance estimates, run the different models and present and discuss results with the trainers.

The following main actions were done:

- **Selection of the data analysis experts:**

The call for proposals for the selection of the Scientific Coordinator (Activity 3 ) foresaw the possibility that the mission of the Scientific Coordinator would be extended to the analysis of the collected data, once the details of the survey design and the planned observation efforts would be defined and the corresponding workload for the data analysis could be assessed.

The Terms of Reference for data analysis prepared by the ACCOBAMS Secretariat were reviewed by the Steering Committee at its meeting on 8 June 2018 (Malaga, Spain). They were then finalized and shared with the Scientific Coordinator and Vincent Ridoux (PELAGIS), in September 2018.

A consolidated proposal was received by the Scientific Coordinator in December 2018 and the corresponding contracts were set up in January 2019, with:

- the Scientific Coordinator for the coordination of the analysis effort and the preparation of the expected deliverables;
- Ana Canadas for data analysis and modelling;
- PELAGIS for data pre-processing.

- **ASI Sub regional data Analysis workshops**

A first data analysis sub-regional workshop for the central Mediterranean was organised on 18-29 November 2019, (Castel Gandolfo, Italy), where a participatory approach to data analysis and interpretation was implemented, with the participation of 15 scientists from Albania, Croatia, Israel, Italy, Montenegro and Slovenia.

Two additional analytical workshops, originally planned in May and September 2020 had to be postponed due to the Covid Crisis to 2022. The second ASI Data Analysis workshop for the Western Mediterranean took place the week on 14-18 February 2022 in Monaco and the third ASI Data Analysis workshop targeted participants from the Eastern Mediterranean and from the Black Sea. It took place online on 1-3 March 2022.

- **Data Analysis Report**

The preliminary results on cetacean distribution and abundance were presented during the MoP7 in November 2019. The Data analysis process and the final consolidated reports of the Mediterranean Sea surveys were finalised early 2021. Results of the 3 sub-regional workshops will be added, as annexes to the reports when possible. The report Estimates of abundance and distribution of cetaceans, marine mega fauna and marine litter in the Mediterranean Sea from 2018 2019 surveys was launched during an ASI short online event on 22 April 2021, who gathered around 200 participants. The reports is available online on ACCOBAMS website, as well as the recording of the online event.

- **Assessment/ Re-Assessment of the Red list Status of cetacean species of the ACCOBAMS Area**

On the basis of the results of the ASI project as well as other data and observations collected in the last few years, new assessments of the conservation status of Mediterranean and Black Sea cetaceans and update of existing ones according to the IUCN Red List Categories and Criteria were launched in 2019. This initiative is the result of a collaboration between ACCOBAMS and the IUCN Centre for Mediterranean Cooperation and is under the coordination of the Chair of the ACCOBAMS Scientific Committee.

The new species status is expected to be accepted for publication in the IUCN Red List in 2021. All the results of these processes were included in the updated Publication Cetacean Status in the ACCOBAMS area published in November 2021 (Activity 12).

## ❖ Black Sea

- **Selection of the data analysis experts:**

The CeNOBS project and budget was developed with the intention to mobilize the same data analysis experts than in the Mediterranean, for coherence and harmonization perspectives.

Following the receipt of a consolidated proposal by the Scientific Coordinator in July 2019, the corresponding contracts were set up in January 2019, with the Scientific Coordinator for the coordination of the analysis effort and the preparation of the expected deliverables and - Ana Canadas for data analysis and modelling.

- **Participatory data Analysis**

A data analysis working group was set up at the end of the Black Sea survey. This group was composed of the data analysis experts, the ACCOBAMS Secretariat and Black Sea experts from the CeNoBs consortium including the team leaders and observers of the survey, and liaison was also made with the Russian colleagues who collected the data in Russia.

A first online meeting for data analysis was conducted at the end of October 2019 in order to explain, develop and validate the analysis approach with a group of experts from the project (including identification of most relevant parameters to use in the model-based analysis).

The group exchanges by emails and during several skype calls over the end of 2019 and 2020. This same group is in charge of reviewing the final survey report and of developing the proposals for threshold values.

The Black Sea data analysis training workshop was planned to be organized back-to-back with the Eastern Mediterranean ASI data analysis sub-regional workshop in Istanbul, Türkiye. Due to the Covid19 situation, part of the workshop was adapted on line the 24 and 25th of September 2019 together with a session on the definition of threshold values as well as during the Eastern Mediterranean/Black Sea workshop (March 2022, online).

- **Data Analysis Report**

The Data analysis process was finalised for the Black Sea early 2021. The report Estimates of abundance and distribution of cetaceans in the Black Sea from 2019 surveys was also launched during the ASI short online event on 22 April 2021 along with the Mediterranean report. The reports are available online on ACCOBAMS website.

#### 4.6.2 Results/outcomes

- Verified, validated and pretreated aerial and boat-based datasets
- 3 subregional data analysis ASI Workshops:
  - Central Mediterranean (18-29 November 2019, Castel Gandolfo, Italy),
  - Western Mediterranean (14-18 February 2022, Monaco)
  - Eastern Mediterranean/Black Sea (1-3 March 2022, online).
- Estimates of abundance and distribution of cetaceans, marine mega fauna and marine litter in the Mediterranean Sea from 2018-2019 surveys<sup>63</sup> (<https://accobams.org/wp-content/uploads/2021/11/ASI-Med-Report-updated.pdf>)
- Estimates of abundance and distribution of cetaceans in the Black Sea from 2019 surveys<sup>64</sup> ([https://accobams.org/wp-content/uploads/2021/04/ASI\\_CeNoBS-Black-Sea-report.pdf](https://accobams.org/wp-content/uploads/2021/04/ASI_CeNoBS-Black-Sea-report.pdf))
- Assessment/ Re-Assessment of the Red list Status of cetacean species of the ACCOBAMS Area, Mediterranean Region

#### 4.7. ACTIVITY 6- SPATIAL MODELING

Reference	Activity description
Action Plan (2017)	Activity 6 - Spatial modeling and identification of critical and preferential habitats
CeNoBS (2019)	Activity 2.2: Assessment of cetacean populations distribution and abundance at the regional scale

##### 4.7.1 Implementation

For the Mediterranean and the Black Sea, this activity was conducted during the analysis of the results of the survey respectively with the Activity 5 and activity 2.2. Spatial modelling approach and identification of critical and preferential habitats were part of the data analysis process and the work was conducted by the contracted experts and partners. In terms of expenses, this activity includes only the external assistance for the data analysis, that are the contracts with the experts and the MoU with partnering organizations (MCR, PELAGIS) in charge of conducting the analysis and also providing training support during 3 sub-regional data analysis workshops.

##### 4.7.2 Results/outcomes

See above (4.6 Activity 5)

<sup>63</sup> ACCOBAMS, 2021. Estimates of abundance and distribution of cetaceans, marine mega-fauna and marine litter in the Mediterranean Sea from 2018-2019 surveys. By Panigada S., Boisseau O., Canadas A., Lambert C., Laran S., McLanaghan R., Moscrop A. Ed. ACCOBAMS - ACCOBAMS Survey Initiative Project, Monaco, 177 pp.

<sup>64</sup> ACCOBAMS, 2021. Estimates of abundance and distribution of cetaceans in the Black Sea from 2019 surveys. By Paiu, R.M., Panigada, S., Cañadas, A., Gol'din, P., Popov, D., David, L., Amaha Ozturk, A., Glazov, D. Ed. ACCOBAMS - ACCOBAMS Survey Initiative/CeNoBS Projects, Monaco, 54 pages.

#### 4.8. ACTIVITY 7 – CONSERVATION RECOMMENDATIONS

Reference	Activity description
Action Plan (2017)	Activity 7- drawing up of concrete recommendations to optimise existing measures to protect the species concerned and prioritisation of actions to be taken at all levels: national, subregional and macroregional
CeNoBS (2019)	Activity 2.2: Assessment of cetacean populations distribution and abundance at the regional scale (thresholds value proposals development) Activity 4.2: Capitalization of the project results with the MSFD Competent authorities (implemented by Green Balkans, CeNoBS Partner)

##### 4.8.1 Implementation

This activity was to be implemented through the organization of a regional workshop dedicated to the development of conservation recommendations based on the results from the 2018 and 2019 Mediterranean and Black Sea ASI surveys, in particular cetacean abundance and distribution estimates.

In order to address it in the most efficient and relevant way, a Consultation Support Group (CSG) was set up to support the preparation of the Terms of Reference of the Workshop in 2020 and 4 meetings were organized in this view. A consultant was recruited to support the Secretariat in organizing, developing and conducting this workshop. The Draft Terms of Reference and Agenda were workshop were first circulated within the ACCOBAMS network and shared with the Members of the ACCOBAMS Scientific Committee, the ACCOBAMS Partners for comments and proposals and to ACCOBAMS National Focal Points. Their feedback was used to complete and update the workshop before presentation to the 13th Bureau of ACCOBAMS in December 2020.

While the workshop was originally scheduled to be held in person in 2020, the constraints due to the Covid crisis forced its postponement to 2021 and eventually its adaptation to an online format. It was decided to implement the workshop through three online sessions over a week preceded by an intensive preparatory work with a group of experts - lead speakers - and contributors. In order to enhance the informal dialogue and enable a favourable environment for open discussion and exchange, the ACCOBAMS Secretariat have commissioned early 2020 a team of professional facilitators - Dialogue Matters. Their assistance focused on preparing the workshop in the most participatory way possible, in spite of the constraints of a tight schedule and the many subjects to be tackled.

Their implication in the workshop preparation process implied that some changes to the initial approach had to be made including the integration of moderation methods while taking advantage of the work already done by the lead speakers. Dialogue Matters provided advice to the Secretariat with a view to optimizing sessions 1 and 2, which included the use of an online tool that would enable written comments to be considered and a voting for system to prioritize possible recommendations or actions to be taken. Dialogue Matters managed the entire session 3, which was dedicated to discuss the interactions between human uses of the sea and cetaceans, bearing in mind the underlying question of how the ASI data could be used to inform any management actions.

**Note:** In the Black Sea, additional work was being done, as part of the CeNoBS project, to develop proposals for threshold values for cetaceans related indicators and criteria, in particular D1C2 (cetaceans populations abundance) and D1C4 (cetaceans' distributional range), in line with the GES Decision (Decision 2017/848). To address that part, a specific session was hold during the CeNoBS Data analysis online workshop on September 25th, followed by exchanges within the workshop group of participants

#### 4.8.2 Results/outcomes

- **ASI Technical Recommendations Workshop - Moving from science to conservation organised online on 11- 12 and 14-15 October 2021**
- **reports and recommendations from the workshop that were used to support the development of the 14<sup>th</sup> Scientific Committee 14.1 Recommendation on the LTMP<sup>65</sup>**
- **Activity 2.2.2: detailed report on cetacean populations distribution and abundance in the black sea, including proposal for threshold values Black Sea proposals of threshold value<sup>66</sup>.**

---

<sup>65</sup> ACCOBAMS-SC14/2021/Doc40

<sup>66</sup> final report and deliverable Paiu, R.M., Panigada, S., Cañ adas, A., Gol`din, P., Popov, D., David, L., Amaha Öztürk, A., Panayotova, M., Mirea-Cândeia, M. 2021. Deliverable 2.2.2. Detailed Report on cetacean populations distribution and abundance in the Black Sea, including proposal for threshold values. CeNoBS project - contract No 110661/2018/794677/SUB/ENV.C2. Constanta. 97 pages. [https://cenobs.eu/sites/default/files/Deliverable\\_2.2\\_Detailed\\_Report\\_on\\_cetacean\\_populations\\_distribution\\_and\\_abundance\\_in\\_the\\_Black\\_Sea.pdf](https://cenobs.eu/sites/default/files/Deliverable_2.2_Detailed_Report_on_cetacean_populations_distribution_and_abundance_in_the_Black_Sea.pdf)

#### 4.9. ACTIVITY 8 – CAPACITY-BUILDING

Reference	Activity description
Action Plan (2017)	Activity 8 - Training workshops for local stakeholders by subregion or group of subregions, in the use of the standardized survey method and in information management
CeNoBS (2019)	Activity 2.2: Assessment of cetacean populations distribution and abundance at the regional scale ( <i>Training workshops</i> )

##### 4.9.1 Implementation

###### ❖ Mediterranean Sea

Considering the complementarity and synergies between the ASI and the implementation of the Integrated Monitoring and Assessment Programme (IMAP) of the UNEP/MAP, the ACCOBAMS Secretariat established a collaborative partnership with UNEP/MAP/SPA-RAC SPA/RAC in 2017<sup>67</sup>, to develop and implement of a national capacity building programme on cetacean monitoring (collection, preparation, data use). This programme was developed on the basis of the capacity building needs identified by each Riparian Country, in particular during the ASI Contact Group member Workshop organized in Tunis on 3-5 October 2017. (See Activity 3.).

In this framework, the following workshops took place in two phases:

##### 1- In 2018, in view of training the ASI observer teams, two regional workshops were conducted prior to the ASI survey:

- the first one allowed to train the ASI aerial survey observers and team leaders to the methodology, protocol and practice of aerial macro fauna survey (ASI Aerials Observers Training Workshop - 23-28 May 2018, Cuers, France)<sup>68</sup>;

*NB: To complete the preparation of the teams, 24 ASI observers who did not yet have aerial work safety training certification received dedicated training (Helicopter Underwater Escape Training) during 4 HUET sessions organized at different locations.*<sup>69</sup>

- the second workshop was dedicated to the team leaders of the countries/areas where aerial survey was not possible and marine vessels used instead (ASI Boat Survey Training, Workshop, Samos, Greece, 18-22 June 2018)<sup>70</sup>.

##### 2- The ASI Capacity building programme continued to be implemented in 2019, in collaboration and with the support of the EcAp MED II initiative (Mediterranean Implementation of the Ecosystem Approach, in coherence with the European Union (EU) Marine Strategy Framework Directive (MSFD)), through a series of workshops dedicated to monitoring methods and software use:

1- the EcAp MED II/ ASI sub-regional training workshop on cetacean monitoring software use (held in French for participants of Algeria, Morocco and Tunisia - 25-28 February 2019, Bizerte, Tunisia);

2- the ASI/ EcAp MED II sub-regional training workshop on cetacean monitoring software use – to be held in English for participants of Egypt, Lebanon, Syria and possibly Türkiye and Cyprus – tent. 24-27 of June 2019, Lebanon);

3- the ASI/ EcAp MED II sub-regional training workshop on cetacean monitoring software (24-27 of June 2019, Lebanon) in English for participants of Türkiye, Lebanon, Egypt and Syria;

4 - the ASI / EcAp MED II on cetacean monitoring methods (16-20 of September 2019 - Kotor, Montenegro) in English for participants of Montenegro and Albania.

**In addition**, the regional boat survey conducted on board the Song of the Whale also provided a significant occasion of capacity building for the 33 observers who came onboard; the costs of this activity were covered by the Survey activity. Each observer who participated to the survey aboard the Song of the Whale was formed on board to the visual and acoustic survey protocols but also on all other aspects linked to life on board.

<sup>67</sup> MoU 06/2017.

<sup>68</sup> There is no report of this event but related documents are available (Agenda, working documents).

<sup>69</sup> This activity was covered under the budget line of the survey implementation (Activity 5).

<sup>70</sup> There is no report of this event but related documents are available (Agenda, working documents).

**Additional actions:**

The ASI project was also instrumental to develop additional capacity building collaborations. In particular, the ACCOBAMS Secretariat supported the development of a project proposal for an academic collaboration between the CNRS Lebanon, INAT (Institut National d'Agronomie de Tunis), Tunisia, and the University of La Rochelle, France, which was funded by the Agence Universitaire de la Francophonie in 2018.

This collaboration led to the setup of a Master 2 research internship on the use of ASI data, as a collaboration between INAT and PELAGIS, for a Tunisian Student. The leftovers from the budget of the MoU 06/2017 with the SPA/RAC were used to support the cost of this internship.

❖ **Black Sea****Capacity building in aerial survey work for cetacean monitoring has been part of the CeNoBS project mainly through 3 workshops and meetings:**

1- a workshop to train all the ASI aerial survey observers and team leaders to the methodology, protocol and practice of aerial macro fauna survey (including practice with flying sessions) : Aerial survey observer training workshop, 12-16 June 2019, Tulcea, Romania<sup>71</sup>. One representative from Georgia and one from Russia participated in the training in order to increase the regional capacity, with ACCOBAMS support;

2 - an online meeting for data analysis was conducted on the 9<sup>th</sup> of October 2019 in order to explain, develop and validate the analysis approach with a group of experts from the project, including the team leaders and observers of the survey (ACCOBAMS, Mare Nostrum, Green Balkans, TUDAV, UkrSCES, NIMRD);

3- a training workshop on analysis and threshold values based on cetacean aerial survey was organized online the 24 and 25 of September 2020<sup>72</sup>.

The last two events were part of the global data analysis approach and are therefore treated in Activities 6 and 7.

**4.9.2 Results/outcomes**

- **All ASI observers and team leaders trained to the aerial survey methods/protocols**
- **Boat based team leaders from Egypt, Lebanon, Syria and Libya trained to the ASI methods/protocols**
- **59 national scientists from the countries of the centre, South and East of the Mediterranean trained in cetaceans monitoring**
- **15 CeNoBS (and Russian) observers and team leaders trained to the ASI/CeNoBS aerial survey methods/protocols**
- **9 Capacity building Workshops organized in the ASI and CeNoBS context:**

Title of the event	Content / Purpose	Date Location	Number of participants	Targeted countries
<b>ASI Aerial observers Training Workshop</b>	Training workshop to prepare all the Aerial survey observers and team leaders to conduct the ASI aerial Survey in the Mediterranean	23-27 May 2018 Cuers, France	<b>42 trainees</b> (additional participants: trainers, Secretariat, officials for the opening and pilots- for a day of exchange with the team leaders.)	Mediterranean and Black Sea countries
<b>4 HUET trainings for Aerial observers</b>	Helicopter Underwater Escape Training – Basic safety training for aerial work	- Marseille- 29-30 May 2018, France	<b>24 trainees</b> in total	Mediterranean and Black Sea countries

<sup>71</sup> Described in CeNoBS Progress report 1, + related documents available (agenda, working documents).

<sup>72</sup> Described in Activity 6 - This workshop was originally planned in presential – conducted online Due to the Covid19.

		<ul style="list-style-type: none"> <li>- Šibenik, Croatia – 15 May 2018</li> <li>- Athens, Greece – May 2018</li> <li>- Costanta, Romania May 8th 2018</li> <li>- Pavia, Italy, 4 April 2018</li> </ul>		
<b>ASI Boat survey Training Workshop</b>	Training workshop to prepare the team leaders to conduct the ASI boat based Survey in the Mediterranean	18th to 22nd of June 2018, Samos Greece	<b>6 trainees</b> (+ 2 trainers+ Secretariat + students from Archipelagos)	Egypt, Lebanon, Syria, Libya
<b>The EcAp MED II/ ASI sub-regional training workshop on cetacean monitoring software</b>	in French Distance sampling and Photo ID monitoring methods – softwares DISTANCE, MARK and SocProg	25-28 February 2019 - Bizerte, Tunisia	<b>14 trainees</b> (+3 trainers, 2 SPA/RAC and Secretariat)	Algeria, Morocco and Tunisia
<b>The ASI / EcAp MED II training workshop on monitoring techniques of cetaceans</b>	In arabic Training on cetaceans biology, monitoring techniques and practice at sea (Photo ID)	15-18 April 2019 Monastir, Tunisia	<b>23 trainees</b> (+ 1 Trainer + RAC/SPA)	Libya, Tunisia
<b>The ASI/ EcAp MED II sub-regional training workshop on cetacean monitoring software</b>	in English Distance sampling and Photo ID monitoring methods – softwares DISTANCE, MARK	24-27 of June 2019, Lebanon	<b>14 trainees</b> (+2 trainers, + Secretariat+ RAC/SPA)	Egypt, Lebanon, Syria and Türkiye
<b>The ASI / EcAp MED II on cetacean monitoring methods</b>	in English Distance sampling and Photo ID monitoring methods – Practice at sea	16-20 of September 2019 - Kotor, Montenegro	<b>8 trainees</b> (+ 3 trainers + NFP + Secretariat + RAC SPA)	Montenegro, Albania
<b>CeNoBS Aerial survey observer training</b>	Training workshop to prepare all the Aerial survey observers and team leaders to conduct the ASI aerial Survey in the Black Sea	12-16 June 2019, Tulcea, Romania	<b>15 trainees</b> (+ 2 trainers + 1 Mare Nostrum )	Bulgaria, Romania, Ukraine, Georgia Russia, Türkiye



#### 4.10. ACTIVITY 9 – SUSTAINABILITY

Reference	Activity description
Action Plan (2017)	Activity 9- Preparatory study for a long-term funding mechanism for monitoring operations relating to the species in question, through optimization of existing resources
CeNoBS (2019)	NA

##### 4.10.1 Implementation

A call for proposals was launched by the ACCOBAMS Secretariat to recruit an expert in September 2019 to conduct a study on “*Developing proposals for long-term funding mechanism(s) for periodical large-scale cetacean monitoring in the ACCOBAMS Area*”.

This call for tenders having proved unsuccessful, the ACCOBAMS Secretariat therefore reconsidered the approach to address the key question of monitoring sustainability, in particular by integrating an external evaluation of the ASI project which would consolidate the reflection on the sustainability of the monitoring efforts. This revised approach was defined and implemented as followed, and is to be interlinked with the Activity 11 (project evaluation)<sup>73</sup>:

**1- An expert consultant was recruited in June 2020 to assist the ACCOBAMS Secretariat in the development of the ACCOBAMS Long Term Monitoring Programme (ACCOBAMS LTMP)** which aims to describe how monitoring efforts should be systematically and regularly replicated over time, so to estimate trends in abundance and distribution of cetacean populations, at regular intervals.

**2 -** In summer 2020, the ACCOBAMS Secretariat secured additional funding from MAVA Foundation to integrate an external evaluation of the ASI project in the LTMP development process, which would consolidate the reflection on the sustainability of the monitoring efforts.

This external assessment aimed to drawing up recommendations that will guide the definition of the LTMP, as well as the conditions for its implementation, particularly in financial terms. Mindful of this, **another consultant was recruited in 2020 in order to elaborate a detailed draft roadmap for the financial sustainability of the ACCOBAMS LTMP**<sup>74</sup>.

During the fall of 2020, the ACCOBAMS Secretariat started a review of the state of implementation of the ASI project with the support of the consultant. This intermediate review, intended to be finalized at the end of the project. Until then and taking into account the significant progresses of the project, served as a basis for the intermediate assessment/evaluation of the ASI project.

This review also aims to support the development of the ACCOBAMS Long Term Monitoring Programme which is conducted in parallel.

Both consultants worked in coordination.

**3 - Following a request from 14th Meeting of the ACCOBAMS Bureau in January 2022, an ad hoc group composed of National Focal Points was established** to support the preparation of the draft Resolution on the LTMP in view of facilitating MOP8 discussions and decision, in particular on budgetary and financial implications. Coordinated by the ACCOBAMS Secretariat and with the support of a consultant, this Ad Hoc Group met on 21 April and 15 June and developed specific provisions for the LTMP draft resolution and additional recommendations to be presented during MOP8<sup>75</sup>.

<sup>73</sup> For which additional funding was granted by MAVA.

<sup>74</sup> Contract 16/2020 – The consultant mission included 3 parts: 1/assist the Secretariat in developing an interim Review of the ASI; 2/ conduct the assessment of the ASI project; 3/ elaborate a detailed draft roadmap for the financial sustainability of the ACCOBAMS LTMP.

<sup>75</sup> ACCOBAMS-MOP8/2022/Doc27

In parallel, a brochure was finalised in August 2022 to support future fundraising efforts to seek for external funding of the next surveys.

**4 - To complete the question of the sustainability of cetacean monitoring**, in accordance with ACCOBAMS PoW (2020-2022), studies were developed by experts in 2021 related to the use of multidisciplinary surveys, such as fisheries / acoustic surveys, innovative technologies (UAV, satellite) and of platforms of opportunity (ferries, whale watching vessels, navy vessels, etc..) to collect data on cetacean's distribution and abundance. The Black Sea region is encompassed in all the actions developed within this activity

#### **4.10.2 Results/outcomes**

- **ACCOBAMS Survey Initiative - Evaluation Report<sup>76</sup>**
- **A Roadmap towards the financial sustainability of monitoring in the ACCOBAMS Area<sup>77</sup>**
- **A Draft resolution on the ACCOBAMS long-term monitoring programme (LTMP)<sup>78</sup> including LTMP Technical description in annexe**
- **A brochure on the ASI and the LTMP for fundraising purposes**
- **An Update on the Potential Use of Unmanned Vehicles for Cetacean Monitoring in the ACCOBAMS Area<sup>79</sup>**
- **A study on the Use of ferries as platforms of opportunity to monitor cetaceans in the ACCOBAMS area: strengthening the network<sup>80</sup>**
- **A study on Monitoring cetacean populations using multi-disciplinary scientific surveys<sup>81</sup>**

---

<sup>76</sup> ACCOBAMS-MOP8/2022/Inf16

<sup>77</sup> ACCOBAMS-MOP8/2022/Inf17

<sup>78</sup> ACCOBAMS-MOP8/2022/DraftRes8.11

<sup>79</sup> ACCOBAMS-MOP8/2022/Inf19

<sup>80</sup> ACCOBAMS-MOP8/2022/Inf23

<sup>81</sup> ACCOBAMS-MOP8/2022/Inf24

#### 4.11. ACTIVITY 10 – COMMUNICATION AND AWARENESS

Reference	Activity description
Action Plan (2017)	-- Activity 10 - Communicate on the project and sensitize socio-economic actors to the integration of the preservation of threatened species and their critical habitats in their activities
CeNoBS (2019)	WP 4 -Activity 4.1: Communication and dissemination of the project activities/results at the regional scale ( <i>implemented by TUDAV, CeNoBS Partner</i> )

##### 4.11.1 Implementation

###### ❖ Mediterranean Sea

This activity included all actions to be implemented in relation with communication and awareness dimensions of the project.

###### a) Communication strategy and tools

An ASI logo was created in June 2017 and an ASI Communication Plan was developed July 2017 with the help of a consultant<sup>82</sup>, to drive the development of communication material and actions. Several communications supports, events and media coverage tools were developed and used throughout the ASI project. The field campaigns in the summer of 2018 were particularly conducive to communication. Short movies, leaflets, posters and writing material were developed, as well as website pages, news and continuous follow up on social media tools such as Facebook or Twitter.

###### b) ASI Small communication and awareness programmes

The ACCOBAMS Secretariat launched in 2018 a call for small communication actions to promote the project at the national level and to increase its visibility in the countries participating in the survey campaign, and more generally to raise awareness about cetacean conservation issues. Seven projects were selected in this context and implemented in 2018 and 2019 (see results)

###### c) ASI Events

- **General public, celebration and awareness-raising events**

Several presentations were made at conferences and events for the general public on the ASI (e.g.: at the Monaco Ocean Week). In particular, implementation of official celebration and awareness raising events on the ASI were organized along the route of the SOTW boat in the Western Mediterranean (Spain, Monaco and Tunisia).

- **Experts events and fora**

To ensure the best visibility to the project and inform the conservation community, presentations of the ASI and its preliminary results were made during several regional relevant meetings, conferences and events between 2017 and 2020 (see above Results). Most of the costs associated with those events were taken from the coordination budget line, in particular when presented by the ACCOBAMS Secretariat.

###### d) Publication of the Updated Cetacean Status Report in the ACCOBAMS area early 2021

A major expected output of the ACCOBAMS Survey Initiative is the publication of an updated Conservation Status of cetaceans in the ACCOBAMS Area. [The previous edition of the ACCOBAMS Status Report](#) was published in 2010<sup>83</sup>.

<sup>82</sup> Contract 10/2017

<sup>83</sup> Notarbartolo di Sciara G., Birkun A., Jr. 2010. Conserving whales, dolphins and porpoises in the Mediterranean and Black Seas: and ACCOBAMS status report, 2010. ACCOBAMS, Monaco. 212p.

Dr. Giuseppe Notarbartolo di Sciara and Dr. Arda M. Tonay were in charge of the writing and preparation of this updated publication which was based on all relevant information collected during the last decade on concerned species, in particular from the cetacean abundance and distribution estimates deriving from the 2018 and 2019 Mediterranean and Black Sea ASI surveys. The development of this work was done in synchronization with the reassessment of the IUCN red list status of cetaceans' species of the ACCOBAMS area. The book illustrations and the layout were chosen and prepared by the Secretariat and a specialized editing consultant/company.

This publication entitled '*Conserving Whales, Dolphins and Porpoises in the Mediterranean Sea, Black Sea and adjacent areas: an ACCOBAMS status report (2021)*'<sup>84</sup> was finalized and launched for the 25<sup>th</sup> Anniversary of the ACCOBAMS, on November 24<sup>th</sup>, 2021. The book has been printed in limited quantities and an electronic version is available online on the ACCOBAMS website on the following link:

[https://accobams.org/wp-content/uploads/2022/03/ACCOBAMS\\_ConservingWDP\\_web\\_2022.pdf](https://accobams.org/wp-content/uploads/2022/03/ACCOBAMS_ConservingWDP_web_2022.pdf)

#### e) ASI Data published

On the basis of the outputs of the Activity 4 on a data management system<sup>85</sup>, a special page on the ACCOBAMS Website was set up to provide open access to ASI datasets. The Exchange Data of the ASI is downloadable from the ACCOBAMS Website, upon filling in of a short form to provide information on the intended use of the data, and agreement to respect the ACCOBAMS Terms of Use. The ASI Exchange Data was made accessible at the time of the ASI special event (4th of November 2019 at MoP7). The operational system was developed by the company Stile Libero Communication Monte Carlo, which is in charge of the ACCOBAMS Website.

#### ❖ Black Sea

In the CeNoBS project, this activity also translates into the activity of the Activity 4.1 Communication and dissemination of the project activities/results at the regional scale (*Work Package 4: Capitalization, communication and dissemination of the project activities and results*) The Leader of this activity was TUDAV. As partner of the project, the ACCOBAMS Secretariat has reviewed all the communication material developed for the project (e.g.: leaflet, press release, poster, Website), with a special attention and input provided on the survey aspects.

The CeNOBS project was presented during several events, including by the ACCOBAMS Secretariat.

Extra support was provided by ACCOBAMS Secretariat for the development of a special leaflet on the Black Sea survey, at the occasion of the ASI special event organized during moP7 in Istanbul, Türkiye.

In addition, the ASI short video on the Mediterranean Survey of 2018 was updated by the ACCOBAMS Secretariat with inclusion of information and images of the Black Sea survey of 2019.

#### 4.11.2 Results/outcomes

##### ❖ Mediterranean Sea

###### ➤ Communication Actions, Events and material developed

Type of communication action/material	Date/period
ASI logo	created in May 2017
ASI Communication plan	July 2017
Communication material on the project: ASI Brochure, posters, Workshop banners, goodies	published at the beginning of the project (2017)

<sup>84</sup> Citation: ACCOBAMS, 2021. Conserving Whales, Dolphins and Porpoises in the Mediterranean Sea, Black Sea and adjacent areas: an ACCOBAMS status report, (2021). By: Notarbartolo di Sciara G., Tonay A.M. Ed. ACCOBAMS, Monaco. 160 p. Layout by: ©le naturographe, 2021 Available from: October 2021 ISBN: 978-2-9579273-1-9

<sup>85</sup> MOP7.Inf12\_Preparatory study for an IMS for cetacean survey data in the ACCOBAMS area and MOP7.Inf13\_ASI Data Policy.

Numerous articles posted regularly on the website and on the social networks Facebook and Twitter	All along the project, higher frequency during the ASI Survey
press kits to announce the campaign and ASI related events	
A 6-pannel exhibition on the project (English/French)	prepared in 2019 (presented at MoP7)
ASI Leaflet "A Mediterranean success story" (English)	prepared in 2019 (distributed at MoP7)
Dedicated FINS Newsletters Special edition in 2019	In 2019 (distributed at MoP7)
- Movies (posted on YouTube and ACCOBAMS Website): <ul style="list-style-type: none"> <li>o <a href="#">ASI Teaser FR and ENG (in 2017)</a></li> <li>o <a href="#">ASI Contact Group Workshop Tunis 2017</a></li> <li>o <a href="#">ACCOBAMS ASI Summer Campaign 2018</a></li> <li>o <a href="#">ACCOBAMS Survey Initiative Summer 2018 and 2019</a></li> </ul>	
Official events to celebrate and raise awareness on the ASI (and ACCOBAMS and cetaceans conservation) along the route of the Research / Vessel Song Of The Whale in the Western Mediterranean; <ul style="list-style-type: none"> <li>- <a href="#">ASI launch in Malaga</a> ( <a href="#">see here</a> as well) stopover of the SOTW during the monitoring campaign (conference, visit of the boat by schools and officials, Painting exhibition ) organized with IUCN Med</li> <li>- ASI Special event in Monaco: - stopover of the SOTW during the monitoring campaign (conference, visit of the boat, officials ...)</li> <li>- <a href="#">ASI Special event in Bizerte</a> , Tunisia during the stopover of the SOTW for general public, partners and officials ( conference with talks, visit of the boat..)</li> </ul>	, June 8th, 2018 (Ocean day)  July 19th, 2018 August 4th 2018
- <a href="#">A conference for</a> the general public during the Monaco Ocean Week 2019 (with HSH Prince Albert de Monaco )	March 25 <sup>th</sup> 2019
- A presentation on the ASI results on turtles at the inauguration of the Turtle Care Centre at the Oceanographic Museum in Monaco	March 2018.
ASI Special event Istanbul for the MoP7	November 4 <sup>th</sup> AM 2019
ASI results release Online event ( <a href="https://accobams.org/video/accobams-survey-initiative-release-event-22-april-2021/">https://accobams.org/video/accobams-survey-initiative-release-event-22-april-2021/</a> )	April 22 <sup>nd</sup> 2021
ASI Special Brochure	Prepared in 2022

➤ **Experts meetings, events and fora**

Event	Place and date	Type of communication
31th European Cetacean Society Annual Conference -	Middelfart, Denmark, Sunday 30th April 2017	Presentation of the ASI during the Workshop "Inputs to the ACCOBAMS ongoing effort to map human threats on cetaceans in the Mediterranean and Black Seas"
The fourth International Marine Protected Areas Congress (IMPAC4)	La Serena – Coquimbo, Chile, from 4-8 September 2017	Presentation of the ASI during a workshop on marine megafauna
ACCOBAMS Fourth Biennial Conference (CSMC4)	Oran, Algeria, 11-13 November 2017	Poster on the ASI
14th Meeting of the Conference of the Parties to	Sharm El-Sheikh, Egypt, 17-29 November 2018	Presentation of the ASI by the ACCOBAMS Chair during the Side Event "How MMPAs and networks of MMPAs can contribute towards Aichi Target 11. A set of tools

the Convention on Biological Diversity		shared at the national, regional and international levels.”
3rd Meeting of the Signatories to the Sharks MOU	Monaco,10-14 December 2018	Side event on ASI preliminary results “The ACCOBAMS Survey Initiative: An Unprecedented Macro-Regional Marine Fauna Survey of the Mediterranean’
GFCM Forum on Fisheries Science in the Mediterranean and Black Sea	Rome, Italy, 10-14 December 2018	ASI preliminary results presentation during an ACCOBAMS Side Event Exhibition on the ASI
UNEP/MAP - Meeting of the Ecosystem Approach Correspondence Group on Monitoring (CORMON) Biodiversity and Fisheries	Marseille, France, 12-13 February 2019	Presentation of the ASI preliminary Results
European Commission Joint Research Centre Floating Marine Macro Litter workshop	Rome Italy, 14-15. February 2019,	Presentation of preliminary results of the ASI on Marine floating liter
EMBLAS-Plus Inception Workshop	Istanbul, Türkiye21-22 Feb 2019,	Presentation of the CeNOBS project and the Black Sea survey
10th edition of the Monaco Blue Initiative -	Monaco, 24 -25 March 2019	Conference on the ASI
5th International Conference on Marine Mammal Protected Areas - Messinia, ICMMPA5	Messinia, Greece, April 8 – 12, 2019	Half day Workshop “The ACCOBAMS Survey Initiative (ASI): lessons learnt and future plans
MARLICE 2019 International Forum on Marine Litter and Circular Economy,	Seville, Spain 10-12th April 2019	Presentation of the ASI during a panel discussion at PANACeA open session
MEDSEALITTER Final Event   International conference and workshop Roma, Italy, June 11-12, 2019	Rome, Italy, June 11 2019	Presentation of the ASI and preliminary results on floating Marine liter
MEDPOL – Regional Meeting on Marine Litter Best Practices	Izmir, Türkiye, 9-10 October 2018	Presentation on ACCOBAMS activities related to marine litter, including the ASI data collection on marine floating debris
MAVA OAPs M4 and M5 regional meeting,	Porto Cesareo, Italy, 2-4 July 201	Presentation on the ASI and preliminary results
42nd Mediterranean Science Commission (CIESM) Congress	Cascais, Portugal 7-11 October 2019	Poster on the ASI preliminary results
ASI Special Event – ACCOBAMS MoP7	Istanbul, Türkiye, 4 November 2019	Half a day event dedicated to the ASI analysis results and activities, with ACCOBAMS National Focal Points and ASI partners
World Marine Mammal Conference – WMMC 19	Barcelona, Spain, 8-12 December 2019	-Two presentations on ASI results presentation (aerial and boat-based surveys) by ASI Scientific Coordinator and MCR -Presentation on the ASI Challenge by the ASI Scientific Coordinator -Workshop ACCOBAMS/AFB “Towards coordinated marine mammal monitoring programmes for MSFD second cycle 2020-2026” - a poster on the Drone project “ Flight parameters for the integration of unmanned aerial vehicles in

		conventional cetacean surveys” University of Haifa, IMMRAC and Murdoch University
CARIMAM online workshop – Session on knowledge acquisition and scientific monitoring	Online, 29 <sup>th</sup> of October 2020	<i>ASI Video presentation and QandA session on the ASI and Survey organization</i>
Webinair Drones	Online, November 17 <sup>th</sup> 2020	<i>Presentation on ASI drones related aspects : “Drones Biodiversité marine : Quel potentiel pour la surveillance de la mégafaune marine à (très) grande échelle ? ”</i>
Integrated Meetings of the Ecosystem Approach Correspondence Groups on IMAP Implementation (CORMONS)	Online, 1-3 December 2020	Attendance to all meeting and sessions (Pollution and Marine Litter, and Biodiversity and Fisheries)  Presentation on ASI results during the Parallel CORMON Sessions Pollution and Marine <i>Litter</i>
CORMON meetings on Biodiversity and Fisheries and 28-29 March 2022	Online 10-11 June 2021	
CORMON meetings on Biodiversity and Fisheries 10-11 June 2021 and	Online 28-29 March 2022	
IUCN World Conservation Congress	Marseille, 4-9 September 2021,	Mediterranean solutions Stand Presentation on ASI approach, experience en results
UN Ocean Conference	Lisboa, 28 June 2022.	Presentation on ASI approach, experience en results

➤ **Awareness-raising activities carried out in the countries: Small Communication Projects implemented**

Project	Organisation	Place and year	Description
<b>"Giant Guardians of Deep Seas (GGDS)"</b>	DMAD and WWF Turkey	Türkiye,2018	Dedicated workshops for students and academics on cetacean conservation and monitoring and "Interactive Photo-Identification and ArcGIS Mapping" and public awareness activities – (press release, book development for children...)
<b>Mediterranean Cetaceans In Our Schools</b>	Blue World Institute,	Croatia,2018	« Mediterranean Cetacean” presentation by Blue World Institute’s Education Team in elementary schools and media coverage
<b>National Awareness Action In Tunisia</b>	Centre National de Veille Zoosanitaire (CNVZ) and Institut National des Sciences et Technologies de la Mer (INSTM)	Tunisia,2018	Awareness Day the importance of monitoring and the conservation of sea turtles and cetaceans - targeting actors of the sea, including fishermen
<b>I Know And Protect My Seas</b>	METU, Türkiye	Türkiye,2018	dedicated section on cetaceans included into existing marine environmental awareness programme entitled ‘I Know and Protect my Seas’ (DTK abbrev.,

			<a href="https://www.facebook.com/denizimitaniyorum">https://www.facebook.com/denizimitaniyorum</a> ).
<b>Dolphin Day and Dolphin Night</b>	MORIGENOS, Slovenia	Slovenia, 2018	Actions are carried out as a combination of public events and a rotating educational exhibition.
<b>Spotlight On Mediterranean Cetaceans</b>	Institut Marin du Seaquarium	France, 2018	Photo Contest and public lecture
<b>Awareness on the ASI in Morocco</b>	Groupe scolaire OSUI Jacques Majorelle	Morocco, 2019	ASI exhibition in School and French Institutes Radio coverage on radio Medi1 Preparation and broadcast of a radio show on Marine conservation, Cetaceans conservation and monitoring and the ASI by high school students

- **Conserving Whales, Dolphins and Porpoises in the Mediterranean Sea, Black Sea and adjacent areas: an ACCOBAMS status report (2021)<sup>86</sup> [https://accobams.org/wp-content/uploads/2022/03/ACCOBAMS\\_ConservingWDP\\_web\\_2022.pdf](https://accobams.org/wp-content/uploads/2022/03/ACCOBAMS_ConservingWDP_web_2022.pdf)**
- **ASI Datasets made available on the ACCOBAMS Website: <https://accobams.org/asi-data-presentation/>**

#### ❖ Black Sea

- **CeNOBS Project leaflet developed at the beginning of the project;**
- **Two press releases were issued after the kick-off meeting and at the end of the aerial survey;**
- **A Leaflet prepared in 2019 “A Black Sea success story” (English) and distributed at MoP7;**
- **Inclusion of CeNoBS survey within the ASI Survey video;**
- **Creation of CeNoBS Website on June 2<sup>nd</sup> 2020;**
- **Attendance to meetings, conferences and fora during which the CeNoBS/Black Sea Survey was presented or discussed (see table below)**

Event	Place and date	Type of communication
EMBLAS-Plus Inception Workshop	Istanbul, Türkiye 21-22 Feb 2019,	Presentation of the CeNoBS project and the Black Sea survey
10th edition of the Monaco Blue Initiative -	Monaco, 24 -25 March 2019	Conference on the ASI (including on Black Sea Survey)
5th International Conference on Marine Mammal Protected Areas - Messina, ICMMPA5	Messinia, Greece, April 8 – 12, 2019	Half day Workshop “The ACCOBAMS Survey Initiative (ASI): lessons learnt and future plans Presentation on CeNoBS
ASI Special Event – ACCOBAMS MoP7	Istanbul, Türkiye, 4 November 2019	Half a day event dedicated to the ASI analysis results and activities, with ACCOBAMS National Focal Points and ASI partners Included a presentation on CeNoBS
World Marine Mammal Conference – WMMC 19	Barcelona, Spain, 8-12 December 2019	-poster on the CeNoBS project -Workshop ACCOBAMS/AFB “Towards coordinated marine mammal monitoring programmes for MSFD second cycle 2020-2026”
SUST-BLACK Conference, MEDREGION ACCOBAMS Cetacean Conservation Module, European Maritime Day Event, BLSAC,	In 2019	Those presentations were made by CeNoBS partners (Mare Nostrum in particular) (no further details available at ACCOBAMS level)

<sup>86</sup> Citation: ACCOBAMS, 2021. Conserving Whales, Dolphins and Porpoises in the Mediterranean Sea, Black Sea and adjacent areas: an ACCOBAMS status report, (2021). By: Notarbartolo di Sciarra G., Tonay A.M. Ed. ACCOBAMS, Monaco. 160 p. Layout by: ©le naturographe, 2021 Available from: October 2021 ISBN: 978-2-9579273-1-9



ANEMONE workshop, Black Sea Action Day, BSBD event on MSFD		
EC Black Sea Marine Biogeographical Region Regional Workshop on Common Approaches to Black Sea Marine Habitats and Cetaceans.	Online, 30 October 2020	Presentation by ACCOBAMS Secretariat during the Cetaceans session: "Results of the 2019 Black Sea Aerial Survey"
European Commission and the European External Action Service (EEAS) Event on regional cooperation in the Black Sea, in the context of the Green Deal "Sustainability in the Black Sea regional cooperation: Advancing the Black Sea Synergy and the European Green Deal".	Online, 16 November 2020 14:00 Session 2	Presentation of CeNoBS Project by Mare Nostrum
CeNoBS final workshop,	9-11 June 2021, online	Final presentation of all activities reports and deliverables/results