

Important Marine Mammal Area Regional Workshop for the Black Sea, Turkish Straits System and Caspian Sea

Virtual Meeting, 22-26 February 2021

FINAL REPORT of the 7th IMMA WORKSHOP

IMMA Secretariat, IUCN SSC-WCPA Marine Mammal Protected Areas Task Force

Contents

Executive summary	3
Report of the Workshop	Э
Annexes	5
Annex I – List of participants	5
Annex II – Workshop agenda	9
Annex III – Template for candidate IMMAs and IMMAs42	L
Annex IV – List of approved IMMAs and cIMMAs	5
Annex V – List of AoI for future consideration	3
Annex VI – Results of participant questionnaire on the use of Zoom and Canvas to run the virtual Black Sea, Turkish Straits System and Caspian Sea IMMA Workshop	j j

This Final Report, along with maps and IMMA background data, is available for download from the IMMA website: <u>https://www.marinemammalhabitat.org/downloads</u>

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Executive summary

From 22 to 26 February 2021, the Regional Workshop for the Identification of Important Marine Mammal Areas in the Black Sea, Turkish Straits System and Caspian Sea was held as a virtual meeting, with the goal to identify and delineate Important Marine Mammal Areas -IMMAs. These discrete portions of habitat, important for marine mammal species, aim to have the potential to be delineated and managed for conservation. The workshop started with 53 preliminary Areas of Interest (pAoI) from the Black Sea and Turkish Straits System and 20 pAoI from the Caspian Sea. Of the total 73 pAoI-32 were submitted by invited experts, 14 were marine protected areas (MPAs) in the World Database of Protected Areas, 24 were Ecologically or Biologically Significant Areas (EBSAs) identified under the Convention on Biological Diversity, and 3 areas had been identified as Cetacean Critical Habitats (CCH) through the Convention on Migratory Species regional agreement ACCOBAMS¹. Added to these 73 pAoI, there were 19 pAoI submitted by participants on the first day of the workshop, to give a total of 92 pAoI for consideration. One by one, these 92 pAoI were considered in the breakout groups and in plenary, utilizing dedicated selection criteria to support identification in the expert-based process. Many of the pAoI were overlapping but provided useful additional information. During the workshop, the group merged some areas and deferred many others, and then prepared cIMMA submissions, proposing boundaries and detailing how each one met the various IMMA criteria. By workshop day five, 23 areas were recommended to go forward as candidate IMMA (cIMMA) proposals to be evaluated by the review panel.

Following independent review and consideration of how, for each cIMMA, the scientific information met the IMMA criteria, some cIMMAs were rejected and most needed either minor or major revision by the participants who were points of contact. In some cases, cIMMAs were recommended for merging which required further consultation between subregional groups. In total, after revisions were made with considerable effort by the participants and members of the IMMA Secretariat, 14 IMMAs were accepted for full status as meeting the criteria. Of the remaining cIMMAs, 1 area was considered to show strong evidence of merit as a future IMMA, even though it did not receive full IMMA approval so it will remain as a cIMMA until it can fully satisfy the criteria. The remaining areas from the review process thus became AoI, joining 4 AoI recommended by the workshop and making a total of 11 AoI to go on the e-Atlas. These AoI, if given further monitoring and survey effort, could be reassessed as cIMMAs in a future IMMA expert identification workshop. The final

¹ The Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) is an intergovernmental agreement under the umbrella of the Convention on Migratory Species. Its purpose is to promote the conservation of cetaceans through international cooperation.

boundaries for the new IMMAs, cIMMA and AoI are shown in Fig. 1. Worldwide, including the Black Sea, Turkish Straits System and Caspian Sea Region, there are now 173 IMMAs, as well as 25 cIMMAs and 140 AoI all shown on the e-Atlas, with the option offered to request background fact sheets and IMMA layers as shapefiles for implementation initiatives (<u>https://www.marinemammalhabitat.org/imma-eatlas/</u>) (Fig. 2). The newly approved areas are also included in the online IMMA searchable database (<u>https://www.marinemammalhabitat.org/immas/immas-searchable-database/</u>).

The 14 new IMMAs, 1 cIMMA and 11 AoI are listed below:

Black Sea, Turkish Straits System: 11 IMMAs and 1 cIMMA

- 1. Balaklava and the Southern Crimea IMMA
- 2. Colchis IMMA
- 3. Emona IMMA
- 4. Kaliakra to Danube Delta IMMA
- 5. Karkinit and Dzharylhach Gulfs IMMA
- 6. Kerch Strait and Taman Bay IMMA
- 7. Sea of Azov IMMA
- 8. Sinop IMMA
- 9. Turkish Straits System and Prebosphoric IMMA
- 10. Karadag and Opuk IMMA
- 11. Western Black Sea IMMA
- 12. Samsun cIMMA

Caspian Sea: 3 IMMAs

- 1. Caspian Seal Breeding Area IMMA
- 2. Caspian Seal Moulting and Haul Out Areas IMMA
- 3. Caspian Seal Transitory Migration and Feeding Area IMMA

Black Sea, Turkish Straits System and Caspian Sea: 11 AoI

- 1. Sakarya Canyon AoI
- 2. Tendra and Yahoriyk Bays AoI
- 3. Anapa-Utrish AoI
- 4. Gelendzhik AoI
- 5. Sochi AoI
- 6. Kizlyar Bay AoI (Caspian Sea)
- 7. Psou to Enguri AoI
- 8. Zernov Phyllophora Field Zakaznyk AoI
- 9. Hirkan and Shirvan AoI (Caspian Sea)
- 10. Offshore Eastern Black Sea AoI
- 11. North-western Black Sea AoI

This virtual online workshop followed the six previous in-person IMMA regional workshops starting in the Mediterranean (Chania, Greece, 24-28 October 2016), and continuing with the Pacific Islands (Apia, Samoa, 27-31 March 2017), the North East Indian Ocean and South East Asian Seas (Kota Kinabalu, Malaysia, 12-16 March 2018), the Extended Southern Ocean (Brest, France, 15-19 October 2018), the Western Indian Ocean and Arabian Seas (Salalah, Sultanate of Oman, 4-8 March 2019), and the Australia-New Zealand and South East Indian Ocean (Perth, Western Australia, 10-14 February 2020). This seventh IMMA Regional Workshop aimed to help provide conservation priorities to, and strategic direction for, area-based marine mammal conservation within the Black Sea, Turkish Straits System and Caspian Sea Region.

The workshop was attended by 25 experts and 8 observers, plus 8 members of the IMMA Secretariat and 2 Russian interpreters for a total of 43 people (Annex I). The expert participants came from 9 countries: Turkey, Bulgaria, Romania, Ukraine, Russian Federation, Georgia, Kazakhstan, Turkmenistan, and the United Kingdom. In a number of cases, the expert held a main residence in a country other than where the research was done, and a number of experts had worked in multiple countries in the region. The observer organisations whose representatives made presentations were the Global Ocean Biodiversity Initiative (GOBI) Secretariat (United Kingdom), the Convention on Migratory Species ACCOBAMS Secretariat (Monaco), the Black Sea Commission (Commission on the Protection of the Black Sea from Pollution) (Turkey), the Key Biodiversity Area Secretariat (Switzerland) and the UNEP-run Tehran Convention Secretariat (Switzerland). The IMMA Secretariat (8 members) from the IUCN Marine Mammal Protected Areas Task Force came from Italy and the United Kingdom.



Fig. 1. Geographic location of the final 14 IMMAs, 1 cIMMA and 11 AoI identified in the Black Sea, Turkish Straits System and Caspian Sea Region



Fig. 2. Latest version of the IMMA e-Atlas, showing various projections. As of November 2021, there are a total of 173 IMMAs, 25 cIMMAs and 140 AoI.

The workshop was organised by the Task Force with support from GOBI funded by the German government's International Climate Initiative (IKI), and the Tethys Research Institute, through a contribution from the MAVA Foundation. Administrative tasks were performed largely by Tethys Research Institute with help from Whale and Dolphin Conservation.

The Black Sea, Turkish Straits System and Caspian Sea Region is an area with highly threatened, endemic taxa. The experts identified IMMAs for the first time for the threatened subspecies of the Black Sea common bottlenose dolphin (*Tursiops truncatus ponticus*), common dolphin (*Delphinus delphis ponticus*) and harbour porpoise (*Phocoena phocoena relicta*), as well as the endangered Caspian seal (*Pusa caspica*), one of the world's smallest seals and the only marine mammal found in the landlocked Caspian Sea. There was also a submission in the Turkish Straits that mentioned Mediterranean monk seals (*Monachus monachus*), although this was the only place in this region where that species was found.

The organisers of the workshop were grateful in the opening sessions to receive presentations from the five observer organisations mentioned above. There were generally short plenary discussions throughout the workshop, but the focus was on the breakout groups that were divided into four rooms covering the four subregions: (1) Turkish Straits System & Southeastern Black Sea, (2) Western Black Sea, (3) Northern Black Sea & Sea of Azov, and (4) Caspian Sea (Table 1). Each was assigned the task of sorting through the relevant pAoI,

merging those areas that might be better considered together and deferring certain pAoI back to the originating authority when the case for becoming a cIMMA was weak, or deciding to put it forward as an AoI to go on the e-Atlas. In the main part of the workshop, the subregion groups prepared a solid proposal for each cIMMA. As most participants had worked together before, many cIMMA submissions were jointly prepared. The cIMMAs were then presented in plenary and considered to be a joint result of the workshop, according to the usual practice in all previous workshops. IMMA Secretariat members Margherita Zanardelli and Caterina Lanfredi presented the final numbers, and maps of all the cIMMA draft boundaries were prepared by Lanfredi and Michael J. Tetley and displayed to participants at the end of each day.

On Day 5, a regional Task Force group and coordinators were set up to further the work and help implement the IMMAs that had come out of the Black Sea, Turkish Straits System and Caspian Sea IMMA workshop. The volunteer coordinators are Pavel Gol'din from Ukraine and Marian Paiu from Romania for the Black Sea and Turkish Straits, and Nataliya Shumeyko from the Russian Federation for the Caspian Sea.

This was the first time the IMMA process was conducted in a virtual workshop which became necessary due to the COVID-19 pandemic. A teaching platform called <u>Canvas</u> was modified to purpose and integrated with the web-conferencing platform Zoom. It was decided to maintain the same agenda and structure that had worked previously including the full fiveday process, although sessions were generally shorter. Coffee breaks and lunch breaks were maintained in the schedule but unfortunately without the option to gather and discuss matters in the margins of the meeting. Discussion among the group, as well as a questionnaire circulated at the end of the workshop, indicated that the general impressions of the meeting were that it was well organised and successful, despite the challenges of working remotely.

Report of the Workshop

Introduction

Due to the Covid-19 pandemic with the global lockdowns, restricted travel and the difficulty of holding in-person meetings, the IMMA Secretariat proposed and sought permission from the donor, GOBI-IKI, to hold an IMMA virtual workshop to include the Black Sea, Turkish Straits System and the Caspian Sea. The meeting agenda and schedule were similar to the previous in-person workshops. IMMA Secretariat member Elena Politi set up an online academic platform called Canvas to hold all the documents, including short video tutorials on using Canvas and Zoom. Michael Tetley meanwhile made video tutorials detailing all aspects of the IMMA identification process. Canvas also offered detailed daily schedules and Zoom links, and after presentations and plenary discussions were concluded, recordings were placed on Canvas for anyone who had missed them, or who wanted to check back. The Zoom configuration included a plenary setting for everyone with the usual options for participating and asking questions in the video and in the chat. Following plenary sessions, multiple breakout rooms were set up to divide the group regionally for discussion purposes in the formulation of candidate IMMAs. There were also break-out rooms available for GIS, with Caterina Lanfredi and Tetley, and a break-out room for the IMMA Secretariat. While Politi made the overall transitions from plenaries to break-out rooms and back, the IMMA Secretariat had the potential to change rooms and to move people to other rooms, such as for conferring about GIS or because someone's expertise was needed in another break-out room. For the most part, traffic between the sessions and the rooms moved seamlessly, and the setup worked well. In Annex VI, there is a brief report of the results of the questionnaire circulated at the end of the workshop to judge the success of the virtual tools and method.

Prior to the start of the workshop, an email discussion ensued between the Secretariat and the reviewers, as a result of questions from participants, and the following rule was agreed:

Since it is customarily assumed that *Tursiops* and *Delphinus* are represented within the Turkish Straits System by the respective Black Sea subspecies *T.t. ponticus* and *D.d. ponticus*, and that the boundaries with the corresponding subspecies found in the Mediterranean (*T.t. truncatus* and *D.d. delphis*) are placed somewhere in the Çanakkale Strait, therefore, for the purposes of the current workshop: any cIMMA proposed in this subregion will consider the Black Sea subspecies as qualifying, and the subspecies found in the Mediterranean as supporting. This rule is adopted for the workshop pending further refinement whenever the data will support it. In addition, the IMMA Secretariat determined that there were not enough marine mammal species in the region to enable the use of Criterion D2 Diversity in this workshop.

IMMA Workshop Day 1, 22 February 2021

This first IMMA workshop in the Covid19-era was opened in Zoom by the IMMA Secretariat webmaster and technical wizard **Elena Politi** at 8.30 UTC. There were 37 participants, including the 8 members of the IMMA Secretariat, two translators and the various observers due to speak in the morning session. Looking around the screen in the opening minutes before beginning the workshop, participants gave smiles of recognition and hellos to familiar colleagues. Most kept their cameras on but pressed mute buttons after saying hello.

WELCOMING ADDRESSES FOR THE IMMA BLACK SEA, TURKISH STRAITS SYSTEM & CASPIAN SEA WORKSHOP

Erich Hoyt, co-chair, IUCN Joint SSC/WCPA Marine Mammal Protected Areas Task Force, welcomed the group to this first virtual IMMA workshop. He conveyed his excitement about working in this only the second Northern Hemisphere region where the Task Force has ventured, and the first since the initial workshop in the Mediterranean in October 2016. He informed the group of 37 participants from 13 countries that this virtual workshop was a new experience for the Task Force but that we were all in this together. He directed them to work within Canvas, where all the documents, videos, agenda, discussion groups and other tools had been set up, and to take advantage of all the tutorials and short videos that explain every aspect of the IMMA process. The IMMA Secretariat and especially Politi would be available to help at the coffee breaks and of course some of the group would be present through the question and answer sessions every day and there would be GIS support in two of the breakout rooms from **Caterina Lanfredi** and **Michael J. Tetley**, all with the goal of making things as simple as possible to be able to draw upon the scientists' expertise.

Hoyt reminded participants that the workshop and Zoom tool were meant to be interactive and that it would be good to use the video function as much as possible because it will help all of us to work together.

Hoyt said that he would start with a short overview presentation and this would be followed by Task Force co-chair **Giuseppe Notarbartolo di Sciara**, and then the Workshop chair **Simone Panigada** would take over to introduce short presentations, some live, some recorded, from five organisations with observers at the meeting.

Presentation by Erich Hoyt, co-chair, IUCN Joint SSC/WCPA Marine Mammal Protected Areas Task Force • The Origin of IMMAs

Hoyt talked about how IMMAs came about and how we got here. He said that marine mammals are indicator species and can act as monitors for biodiversity and the overall health of the ocean. At the start of 21st century, there was a growing recognition that marine mammals were being missed out in various conservation planning processes. This awareness came through the International Committee on Marine Mammal Protected Areas (ICMMPA) which was formed in 2008 to bring together MPA managers, researchers, governments and NGOs; after its first two conferences in 2009 and 2011, the committee voted to form an IUCN Task Force to get greater traction toward obtaining recognition of marine mammal habitat needs. The new tool of IMMAs was devised with specific criteria and a robust process for identification and peer review.

There was no systematic process for presenting marine mammal data at the Convention on Biological Diversity workshops on ecologically or biologically significant areas (CBD EBSAs) or at other international meetings. Much of the data was unpublished. There was a realization in the ICMMPA and in the Task Force when it was founded in 2013, that many MPAs were designated for political or socioeconomic reasons without ecological boundaries and not based on marine mammal habitat considerations. There was a need to highlight important marine mammal habitat based on science first and then to move forward with efforts to try to protect that habitat through spatial and other measures and through monitoring in the future.

Hoyt talked about what IMMAs are and gave an overview of the process and the regions covered to date and plans for later this year to cover the South East Tropical and Temperate Pacific Ocean. He showed three map examples of how the previous workshops had moved from preliminary AoI before a workshop, to candidate IMMAs in a workshop and then to the final approved IMMAs.

Hoyt also mentioned that the legacy of the IMMA work was to identify coordinators in each region who could carry on with efforts to draw attention to IMMAs and to report on their take-up in the region, as well as to keep the group from the workshop and the Secretariat informed. One or two participants were encouraged to step forward at some point during the meeting.

Hoyt then introduced his co-chair Giuseppe Notarbartolo di Sciara.

Presentation by Giuseppe Notarbartolo di Sciara, co-chair, IUCN Joint SSC/WCPA Marine Mammal Protected Areas Task Force

Notarbartolo di Sciara gave updates on the numbers of IMMAs identified to date, 159 IMMAs, and presented performance indicators. He presented the maximum and minimum sizes and other details about IMMAs, cIMMAs and AoI, and gave accounts of the species that have been included to date. He recalled the 3rd International Marine Protected Areas Congress (IMPAC 3) in Marseille in 2013 where the IUCN with the International Committee on Marine Mammal Protected Areas (ICMMPA) gave birth to the Task Force and when an expert workshop was held to devise IMMA criteria and align it with the IUCN key biodiversity areas (KBAs), the important bird and biodiversity areas (IBAs) and the CBD EBSAs. The purpose of IMMAs was to develop a place-based conservation tool identifying discrete portions of habitat, important for one or more marine mammal species, that have the potential to be delineated and managed for conservation.

Notarbartolo di Sciara explained that IMMAs are a scientific product generated by the best available science. IMMAs come from an evidence-driven, purely biocentric process based on the application of scientific criteria to scientific information. IMMAs are not created in a vacuum; there are many processes and organisations that can use them. Other initiatives including CBD EBSAs, marine spatial planning (MSP), marine protected areas (MPAs), International Maritime Organisation (IMO) particularly sensitive sea areas (PSSAs) and (KBAs) can utilize products of the IMMA process. A significant step was made when the Convention on Migratory Species (CMS) adopted a resolution recognizing the IMMAs and engaged their member States to cooperate, which put IMMAs into the global arena. At the 2017 CMS COP, Resolution 12.13 established that IMMAs can promote ecological networks and connectivity, and acknowledging the IMMA criteria and process, requested Parties and inviting Range States to identify specific areas where the identification of IMMAs could be beneficial. The resolution also invited the CBD, IMO and IUCN to consider IMMAs as useful contributions for the determination of EBSAs, PSSAs and KBAs.

Notarbartolo di Sciara then introduced Simone Panigada who had agreed to chair the workshop. He introduced the five speakers, some of whom had recorded their presentations but would be present for the plenary discussion. He said that after these short presentations he would call for all participants to say a few words to introduce themselves. Panigada called for David Johnson to begin his talk. He coordinates the Global Ocean Biodiversity Initiative (GOBI) that includes the current IMMA work, and has been an observer at several of the IMMA Regional Workshops to date.

Presentation by Prof. David Johnson, GOBI Coordinator

David Johnson provided some introductory context for participants. He recalled the 2019 First Global Assessment by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services that had put into sharp relief the current global extinction risk in different species groups. These alarming trends inform measurable targets discussed by a Global Deal for Nature concept to better protect biodiversity (Dinerstein et al., 2019). This concept illustrated the additional effort needed to protect areas, represent different ecoregions, maintain and restore connectivity of marine waters and reduce threats, based on a 2018 benchmark.

The annual expansion of protected areas across marine and terrestrial realms on Earth was highlighted (Maxwell et al., 2020). Currently 7.68% of the ocean is covered by marine protected areas (Protected Planet, 2021). Over the last decade the number and spatial extent of MPAs have increased rapidly with jurisdictional and regional differences. But to meet the Convention on Biological Diversity's (CBD's) 2050 Vision, and aspirations as set out in the zero draft of the post-2020 Global Biodiversity Framework, it will be essential to know where additional coverage is needed and where conservation efforts should be prioritized.

GOBI is funded by the International Climate Initiative (IKI). The German Federal Ministry for the Environment, Nature Conservation and Nuclear safety (BMU) supports GOBI on the basis of a decision adopted by the German Bundestag and the IMMA process is one of six work strands supported over a five-year period (2016-2021). GOBI has sought to deliver scientific and technical input to inform the CBD's work on ecologically or biologically significant areas (EBSAs). EBSA and IMMA data are mutually reinforcing, hence, despite COVID-19, we have come together in this workshop due to the importance of work to establish and recognize IMMAs in the Black Sea, Turkish Straits System and Caspian Sea Region.

Presentation by Andrew J. Plumptre, Head, Key Biodiversity Area Secretariat

Andrew Plumptre introduced Key Biodiversity Areas (KBAs) as sites of importance for the global persistence of biodiversity. He said that criteria for their identification were developed following extensive consultation of the conservation community over many years with the aim of harmonising approaches to identifying globally important sites for species and ecosystems. In 2016 the KBA Standard was published which provides 11 criteria for the identification of KBAs nested within five overarching categories: Globally threatened biodiversity, geographically restricted biodiversity, ecological integrity, biological processes and irreplaceable sites.

KBAs are recognised as indicators for the Sustainable Development Goals 14 and 15, together with the Convention on Biological Diversity's Aichi Target 11. Ongoing discussions around the post-2020 global biodiversity framework is encouraging the use of KBA language in targets and indicators. KBAs are also recognised as 'Critical Habitat' by several finance safeguarding agreements such as International Finance Corporations performance standard 6

and the 120 banks that have signed up to the Equator Principles. What this means is that banks will require specific actions to apply the Mitigation Hierarchy and ensure no net impact on KBA trigger species at sites if they are to lend the funding for a development to proceed.

IMMAs and KBAs use a similar approach to identifying sites of importance and a comparison of the criteria is given in the Guidance for identifying IMMAs. Many marine mammals move over large distances and as a result they are less likely to have KBAs identified for them, except particular sites such as calving grounds or sites where they congregate to feed. A recent example is a KBA identified for sei whales around the Falklands Islands/Malvinas. IMMAs tend to encompass larger areas than KBAs. In this workshop, KBAs are most likely to be identified for the Caspian seal and it would be useful to collate the data so that in addition to IMMAs, the information can help also to identify KBAs, given many of the experts will be together and can provide the relevant data.

Presentation by Irina Makarenko, Commission on the Protection of the Black Sea against Pollution

Irina Makarenko from the Black Sea Commission's Permanent Secretariat expressed her appreciation for the IMMA workshop covering the Black Sea basin and took the time to greet colleagues from the Caspian Sea, noting the importance of coordinating these conservation efforts.

She explained that the Black Sea Commission was created as an executive body to implement the provisions of the regional sea convention, with the full name being Convention on the Protection of the Black Sea Against Pollution, also known as Bucharest Convention. The Black Sea Commission is responsible for promoting the implementation of the Convention and its protocols. It was established *inter alia* to monitor and assess pollution, to control pollution from land-based sources, to ensure conservation of biological diversity, to address environmental safety aspects of shipping, to deal with management of fisheries and other marine living resources, and to promote the integrated coastal zone management and maritime policy.

Two dedicated groups deal with the conservation of the biodiversity and the management of fisheries; thus, they also contribute to the conservation of marine mammals in the Black Sea. Since 2002, in accordance with the provisions of the Memorandum of Understanding which was signed between the Black Sea Commission and the ACCOBAMS Agreement, the Permanent Secretariat of the Black Sea Commission has the honour to serve as the Black Sea subregional coordination unit for ACCOBAMS, which concerns the conservation of the cetaceans in the Black Sea. Makarenko said she was pleased to mark the outstanding level of

cooperation between these organizations and the solid intention to continue efforts in the Black Sea region together with other relevant partners.

Makarenko also wanted to mention the collaboration with Turkish partners, to the Romanian NGO Mare Nostrum, as well as other relevant projects and initiatives. During the last years within the Memorandum of Understanding with the support of ACCOBAMS, the Secretariat managed to introduce the cetacean conservation modules in the existing postgraduate programmes for teachers and PhD students in the Black Sea. The Secretariat also participated in the ACCOBAMS Survey Initiative in 2019 — an unprecedented large-scale effort involving all the Black Sea riparian countries, aiming to estimate cetacean population abundance and distribution in the Black Sea. The Secretariat also assisted ACCOBAMS in the meeting of parties in Istanbul in 2019 and in the workshop on the description of ecologically or biologically significant areas, the so-called EBSA sites, in the Black and Caspian seas. The 17 sites named as EBSAs were adopted during the CBD Meeting of Parties in 2018. At least two of them were selected due to the abundance of marine mammal species, requiring more conservation effort.

The Black Sea Commission supports this workshop and hopes that the results will contribute to better and wider application of IMMA criteria, covering the key biological and ecological considerations for marine mammal species. The Black Sea Commission stands ready to assist the Task Force in the dissemination and in sustaining of all its efforts. Makarenko wished success to this Regional IMMA Workshop and to all the endeavours aimed at conservation of marine mammals in the Black Sea and the Caspian Sea.

Presentation by Susana Salvador, ACCOBAMS Executive Secretary

Susana Salvador introduced herself as the recently appointed Executive Secretary of the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS). She talked about the main objective of ACCOBAMS, which is to achieve and maintain a favourable conservation status for cetaceans by reducing existing threats and protecting their habitats. ACCOBAMS' commitment combines efforts towards the conservation of threatened species and stronger habitat protections with its 24 member countries committed to establish and manage protected areas that serve as cetacean habitat. ACCOBAMS parties (countries) and the ACCOBAMS Scientific Committee have been engaged in identifying cetacean critical habitats (CCH) which refers to those parts of the cetacean range that are essential for day-to-day well-being and survival and for maintaining a healthy population growth rate. ACCOBAMS is therefore continuously working on the identification of new cetacean critical habitats ensuring that appropriate threat-based spatial management solutions are viable. Its identification process is based on the overlapping of IMMAs with the mapping of

anthropogenic threats. So in this context, IMMAs are vital to provide an initial biocentric process enabling the frame for the definition of cetacean critical habitats in which spatial distribution of threats is streamlined. Therefore, management advice provided by ACCOBAMS to its member countries is based on the integration of both IMMA and cetacean critical habitat concepts, and also the definition of priority mitigation solutions on a case-by-case basis.

In 2016, Areas of Interest for cetaceans were assessed with regard to the Mediterranean Sea during a joint IMMA Workshop organized by the IUCN Task Force, ACCOBAMS and the Tethys Research Institute. Salvador congratulated and thanked the IUCN MMPA Task Force and the scientists for the organization of this IMMA Workshop regarding the Black Sea, the Turkish Straits System and Caspian Sea Region. She noted that five Black Sea countries are also member countries to ACCOBAMS and she noted ACCOBAMS assistance is available to implement effective measures in favour of cetacean conservation. She said that they are extremely grateful to the experts working on marine mammals for their commitment, for their good collaboration efforts and that the ACCOBAMS Secretariat firmly believes that a strong collaboration between all relevant organizations is key to strengthening the effectiveness of joint action.

Presentation by Mahir Aliyev, Coordinator, Tehran Convention Secretariat

Since 2016, the world has embarked upon a journey towards implementing an ambitious program of Sustainable Development Goals (SDGs) to achieve a prosperous future in harmony with the environment. One of these goals sets the task to secure biodiversity and ensure good management of water, oceans, forests and natural resources. Biodiversity and healthy marine and terrestrial ecosystems are indispensable for inclusive and balanced development.

Mahir Aliyev noted that as we reaffirm our commitment to confront emerging challenges, it is clear that global partnerships can only be built with regional cooperation established by neighbouring states within adjoining ecosystems to protect their valuable shared natural assets. He said that the collaboration of the five Caspian states to keep the Caspian Sea healthy and prosperous was one such original success story that supported the global partnership for environmental sustainability and that our workshop was stepping up the cooperation between the countries in the Caspian and the Black Sea basins.

Aliyev gave us some important background on the Caspian Sea, the planet's largest landlocked water body. Its isolation from the world ocean and specific climatic and salinity conditions have created a unique ecological system with some 400 species endemic to Caspian waters. However, oil and gas activities, industrial pollution, exploitation of biological resources and destruction of natural habitats have been jeopardizing the environmental balance of the Caspian ecosystem. In this connection, the 2003 Framework Convention for the Protection of the Marine Environment of the Caspian Sea, referred to as the Tehran Convention, was a historic breakthrough for the littoral states in their intention to stop environmental degradation and preserve one of the world's most precious ecosystems. As the first legally binding agreement among the five Caspian states, the Tehran Convention serves as an example of regional cooperation and the way to effectively protect livelihoods, health and well-being of present and future generations of people living around the Caspian Sea. Six years ago, the Caspian states adopted a Biodiversity Protocol within the Framework of the Tehran Convention which commits its littoral states to protecting and preserving the Caspian ecosystem, safeguarding threatened species, preventing their decline and damage and conserving those areas that best represent the high range of species, special habitats, and ecosystems as well as natural and cultural heritage. These activities are essential not only for the marine environment itself, but also for the health and well-being of the communities that live by the Caspian shores.

Aliyev declared that the Caspian Sea continues to face significant environmental challenges that can only be addressed through committed regional cooperation. The Caspian seal, *Pusa caspica*, is a marine mammal endemic to the Caspian species and listed as Endangered in the IUCN Red List. The Caspian seal population, numbering about 1 million in the beginning of the 20th century, has since then been declining to just several hundred at present. Caspian seals, their habitats and ecosystem services, are threatened by a range of current direct anthropogenic pressures, including unsustainable fishing practices as well as growing climate change impacts such as decrease in sea level, increased water temperatures and reduction in winter of the ice coverage which the seals use for reproduction. With the objective to stop their population decline, the Caspian states cooperating under the Caspian Environment Program produced a Caspian Seal Conservation Action Plan in 2007 and a roadmap towards seal protected area development and implementation in 2012. However, to date, few of the recommendations of these strategic documents have been implemented.

Aliyev stated his belief that regional initiatives like this one today help bring the stakeholders closer to each other and put another step forward on the way to achieving the goals of sustainable development for people and the ecosystems they share.

At the conclusion of the short presentations, Panigada thanked the speakers and began asking the 38 participants to introduce themselves, calling on them one by one according to Zoom positioning and encouraging them to use their video when speaking. He also introduced the two translator/interpreters Jenny Mercer and Spurgeon Vasanthakumar, students at the University of St. Andrews who had volunteered to provide English and Russian translations as needed for several of the Russian speaking scientists.

Politi then offered some background on the inner workings of Canvas and walked the group through some of the key aspects. The agenda was briefly presented and adopted, with Panigada as the workshop chair. Then Panigada called for a half-hour coffee break.

After the coffee break, Panigada went over the 'Inventory of Knowledge' document. Much of this was a result of data and information requested from all the scientists before the workshop. The findings were as follows:

• The knowledge level is high in the Black Sea, less so in the Azov Sea and moderate in the Caspian Sea.

• The proposed species list for the Black Sea, Turkish Straits System and Caspian Sea includes as qualifying species the common dolphin, *Delphinus delphis ponticus*, the common bottlenose dolphin, *Tursiops truncatus ponticus* and the harbour porpoise, *Phocoena phocoena relicta* for the cetaceans, and the Caspian seal, *Pusa caspica*, and the Mediterranean monk seal, *Monachus monachus*, for the pinnipeds.

• All areas and species carry a high conservation concern.

• The Black Sea contained oceanographic features such as submerged banks and troughs, as well as sea surface temperatures that could help in the determination of cIMMA borders. There was also seasonal ice coverage for the Caspian Sea.

Next Lanfredi presented the 'Preliminary Areas of Interest (pAoI) Report' that she had prepared. There were 73 preliminary AoI: 32 submitted by participants, 24 in the Black Sea and 8 for the Caspian Sea. The other pAoI consisted of 24 EBSAs (Black Sea 13, Caspian Sea 11), 14 existing MPAs (Black Sea 13, Caspian Sea 1) and 3 ACCOBAMS cetacean critical habitats (CCHs). The subregion analysis showed that 2 pAoI were in the Turkish Straits System, 49 in the Black Sea, 2 in the Sea of Azov and 20 in the Caspian Sea.

Importantly, Lanfredi highlighted where there were spatial overlaps. These resulted in 3 hotspots and 15 warm spots in the Black Sea and 3 hotspots and 6 warm spots in the Caspian Sea.

Lanfredi thanked all who had submitted preliminary AoI.

The Inventory of Knowledge and the pAoI Report fulfilled the goal of acquainting all participants, observers and the IMMA Secretariat with an overview of the region and enabled planning toward dividing the region into subregions for the work in the days to come.

Next Panigada opened the session to questions.

Shirin Karryyeva asked if the group should include mention of other mammals in the candidate IMMA proposals or only the five species of marine mammals.

Lanfredi replied that it was only the marine mammals.

A question also arose about the estuarine areas where some of the region's marine mammals go. Why weren't these areas included on the map? IMMA Data Coordinator and GIS expert Tetley explained that the map images were done roughly following the coastline but in fact estuaries are included. He showed examples. But he pointed out that the IMMA workshops to date have not considered freshwater cetaceans and pinnipeds and that these would be part of a separate future freshwater IMMA workshop.

Olga Shpak asked about two more potential pAoI that she felt needed attention and said she would fill out a form for them. **Pavel Gol'din** said that he would be adding a pAoI for the entire Sea of Azov today. Shpak then asked about the eastern Black Sea area off Abkhazia that stretches from the Russian border and may also include Georgia and she asked Georgian colleague **Zurab Gurielidze** if he wanted to submit something to recognize the high concentration of cetaceans in this area.

Gurielidze indicated this was a problematic no-go area. He said if we would make something here it would not be something we could implement in any way. Notarbartolo di Sciara replied that the only reason for not naming this area as a pAoI would be if we don't have enough data. Gurielidze wasn't sure if there was a strong enough case. Gol'din said there are some data from the 1980s as well as a single aerial survey. Hoyt added that if the data are robust then we should include it as we are non-political here, only biocentric. Tetley reiterated Hoyt's point.

Next Gol'din remarked that the group could be missing another source of original data available through the Berne Convention, the so-called Emerald Sites Network. The harbour porpoise is listed in the annex of that convention and there were areas identified as important for Bern Convention species, which are mapped and can be added to the bulk of data that we have already.

Panigada asked if Gol'din could send links and if Tetley and Lanfredi could add these areas to the pAoI already collected.

Ayaka Amaha Ozturk asked how we should use the EBSAs? She had been part of the Black Sea EBSA meeting and noted that the areas were already in place for marine mammals in this region. Tetley, however, pointed out that EBSAs had some different criteria, included other species such as birds to help define broader biodiversity, and Notarbartolo di Sciara emphasized that the EBSA process was inevitably, at least in part, a political process.

Panigada said we should remove the political and keep the scientific aspect. Notarbartolo di Sciara added that the EBSA process tells us that there are areas important for marine mammals here but what we're doing is a new process, ideally with more data and a focus strictly from the marine mammal point of view. The EBSAs as pAoI are just a reference point to consider.

Lanfredi noted that she will add these additional areas from Gol'din's suggestion to the list of pAoI — the pAoI Sorter Table. This is the table that each breakout group will process to select out the pAoI in their subregion and consider it against the various criteria. The table is continuously updated by **Margherita Zanardelli** from the IMMA Secretariat with the frequent modifications of names and merging of pAoI, keeping track of the original data. Every morning it will be available on Canvas in an updated version at the top of the scrolling page for that day.

Panigada pointed out that tomorrow, at the start of Day 2, everyone would split into breakout groups with the task of going through the pAoI in the pAoI Sorter Table covering each subregion, discussing among the group which ones are to go forward as cIMMA and which can be amalgamated into others or discarded or determined that there was insufficient evidence for a cIMMA proposal, but worth considering as an AoI. There is a list of questions to be asked for every pAoI (Box 1). In this region, however, question 4 would not be considered as it applies to IMMA Criterion D2 Diversity. Before the workshop began, as noted earlier, the IMMA Secretariat determined that there were not enough marine mammal species in the region to enable the use of Criterion D2 in this particular workshop.

Box 1. Facilitator Guidance and Questions for Preliminary Areas of Interest (pAoI)

1. Does the information available for each species in the pAoI satisfy one or more of the IMMA selection criteria?

2. Is there information or data to be able to create a boundary around the species/area for a cIMMA?

3. Could the pAoI species/area be combined with other pAoI for different species to create a multi-species cIMMA? Are they created with different criteria? Do they occupy separate space?

4. If the pAoI is not suitable for meeting the IMMA selection criteria, could the species/area be used to meet the IMMA selection Criterion D2 on Diversity when combined with other overlapping AoI for different species?

5. If the pAoI for the species/area is not suitable as a cIMMA, and cannot be used to support another cIMMA for a different species/area, could the pAoI for the species be either (Option A) kept as an AoI to inform a future process to be put on the IMMA e-Atlas or (Option B) not considered as an AoI on the IMMA e-Atlas?

Note: No. 4 was not used for this region as no areas qualified for the Criterion D2 Diversity.

Then Panigada displayed the original division into subregions (Fig. 3) and the revised map that would be used for the planned breakout rooms on the map (Fig. 4). He pointed out that everyone would be assigned to the room that corresponded with their main expertise (Table 1).

Dimitar Popov asked how we could deal with pAoI that were split across subregions and Panigada answered that participants would be able to switch between rooms if they needed to confer with others or lend their expertise.

Mirgaliy Baimukanov asked about unpublished data and Panigada assured him that we can use them, but the reviewers need to be able to verify the source and that providing some detail of the methods used to generate the information would help.



Fig. 3 Original proposed subregions for the IMMA workshop



Fig. 4 Revised subregions to be used for breakout rooms

Table 1. Subregions for each breakout group and the group coordinators and GIS persons available

Breakout group Subregior		Group coordinator / facilitator	Advisor on call	GIS Technical		
1	Turkish Straits System & South- eastern Black Sea	Ayaka Amaha Ozturk	Giuseppe Notarbartolo di Sciara	Michael Tetley		
2	Western Black Sea	Marian Paiu	Simone Panigada	Caterina Lanfredi		
3	Northern Black Sea & Sea of Azov	Pavel Gol'din	Margherita Zanardelli, assisted by Erich Hoyt	Caterina Lanfredi		
4	Caspian Sea	Simon Goodman	Gill Braulik	Michael Tetley		

IMMA Workshop Day 2, 23 February 2021

Panigada welcomed the group to Day 2, noting for some that it was morning and others midday. He pointed out that there had been a number of new pAoI submitted. He said that we would first have a plenary with discussion and then he would show the draft division into four groups, with the proposed assignment of participants, to work through the pAoI list and decide which ones would go forward as cIMMAs. He pointed out that all this was subject to agreement from participants. But first he said there were a few issues we should deal with coming from **Simon Goodman** who posed a question in email.

Goodman explained that the northern Caspian Sea is a highly dynamic environment, particularly with sea level change and that there is a predicted decline of between 5 and 20 meters for the Caspian Sea by the end of the century. Due to the shallow nature of the North Caspian, these fluctuations in sea level can happen rapidly and therefore a fixed protected area would become irrelevant over short time scales. He said that they had already seen this happen with the EBSA identified which is now mainly dry and inaccessible to seals. These environmental changes need to be factored into the decision-making. Goodman offered that a dynamic protected area model might be more appropriate, but recognised that there are technical issues about how to define IMMAs, and how they might tie in with legislation for the countries and whether the legislation exists that could accommodate dynamic zoning.

Notarbartolo di Sciara said that the IMMA process would have to do the best it could under the circumstances. He noted that there will be a process for changing IMMA boundaries every decade or so, but that we would have to define the concern in the description of the area. He said that IMMAs are not MPAs so we're not concerned about regulations so much but indeed, later on, the governing institutions will face that issue. To some extent, all the IMMAs worldwide are subject to some movement, but it may well be more extreme in the Caspian Sea.

Next Hoyt said that in the Antarctic IMMA workshop there was an extensive ice edge area that is a magnet for feeding pinnipeds and cetaceans and we had to make a larger area to allow for the seasonal fluctuations in ice cover. Thus, one approach for the Caspian could be to make a bigger IMMA to accommodate changes. There is also the possibility to insert other notations into the description of an IMMA, or even to do a kind of zoning of the IMMA on the map to describe the potential range of changes.

Tetley said that this has been an issue faced also by the CBD EBSA process such as in the Arctic with dynamic areas associated with ice. It is possible to make a larger boundary but then to show in supplementary maps how that boundary is affected by sea level on an annual or even longer basis, based on decadal averages. But the IMMA is a knowledge product that shows the best available information that we have now so it's not appropriate to predict or propose boundaries based on models, but if we revisit these areas every 10 years, those revisions can be made. And in some cases, for example with the Mediterranean monk seal, we made revisions only a few years later. Tetley also talked about the issue of what to do about habitats that had changed due to whaling where the whales were removed or with monk seal hunting, the caves being empty, or other habitats abandoned or made impossible to access due to climatic conditions. These areas are also worth noting; they may be AoI but would not qualify as IMMAs.

Goodman thought that was helpful and said that a potential solution in the North Caspian would be to ensure the polygons are large enough that they can accommodate the changes in sea level as well as the impacts on the haul out areas. Goodman wondered, however, what to do about the haul out areas abandoned due to disturbance, where the seals spend time in the adjacent water near the haul-out and might return to haul-out if the disturbance was removed. Should these be candidate IMMAs as well?

Various responses from the IMMA Secretariat indicated it would be a case by case basis determined within group 4. The abandoned haul out might be an AoI at minimum, similar to an area formerly used by whales before intensive whaling, but an area still having the conditions that might support whales in future.

Tetley said that whenever we are thinking about proposing a cIMMA, we have to relate it back to the criteria and what evidence supports that rationale. It's not just areas where

animals are seen or areas that they've used. It's about the place and why the place supports the feeding area or reproductive area and so on.

Panigada next asked Hoyt to explain about Criterion A on threatened species. Hoyt said that we're not just picking places where animals are seen, as Tetley said, but we need to look at the criteria and the evidence. He directed participants to Annex 2 in the Guidance which had a concise list of the criteria with the qualifying scenarios, explanations and examples. Category A is a bit different than the others because it focuses on species or population vulnerability. And the qualifying scenario is 'areas containing habitat important for the survival and recovery of threatened and declining species or populations.' So, it's the habitat that is actually supporting that survival and recovery, along with the evidence to support that the habitat is important for that survival and recovery.

Next Panigada showed everyone the proposed division into subregions (Fig. 5). The suggested division of participants was also presented. Several people asked to be moved and Panigada again stressed that there would be fluidity as needed between the four groups. Then Panigada went through the questions for each group to ask in going through the many pAoI and deciding which would go forward as cIMMA proposals (Box 1). Johnson was keen to remind participants that besides seeing whether the EBSAs could be used to make cIMMA proposals, and recognising that the boundaries might well have to change, that it would be useful to see how they might be altered in future to become more valuable in light of additional marine mammal information.

The group took a coffee break and then Politi set up the breakout rooms on Zoom, reminding participants that they could only talk and chat within that room and to use the help button if they needed help (Fig. 5). The four groups started going through the pAoI in their subregion one by one, looking at the table with the 92 pAoI and separating out those in their subregion. At the end of breakout session before lunch the groups briefly reported that they had lots of overlaps but were in the process of getting them down to the key areas to go forward. The Caspian Sea subregion had put together 4 cIMMAs with multiple discontinuous polygons based on Caspian seal activities, including haul outs, feeding, migration and moulting.

After lunch, Panigada pushed the groups toward coming up with a final list of pAoI that could become cIMMA proposals. Shpak noted that there were various proposals for cIMMAs along the northern Black Sea coast that had good evidence along the coast, but the outer boundary had varied in extent. She asked whether the group had a definition for 'coastal waters' that could be used uniformly in the Black Sea. Distance from shore, usually 12nm, was often chosen due to administrative and logistical purposes, but using bathymetry with perhaps 60m depth would make more sense. Tetley said that there was no single rule for coastal waters, or for producing boundaries, so the decisions should be made on best

available evidence for each area. One rule would mean we could lose the nuances that come from the data. Panigada said there would time later in the GIS room to map it out. The breakout rooms were then reconfigured by Politi for the afternoon.



Fig. 5 Snapshot from the breakout rooms in action

IMMA Workshop Day 3, 24 February 2021

Panigada welcomed the group to Day 3 and explained that we would be starting the drafting of the candidate IMMAs today after plenary. He noted that there would be a need for some of the breakout groups to work together to resolve proposals that overlapped subregions. These included subregions 1 and 3, 1 and 2, and 2 and 3. Various discussions ensued between Panigada, Marian Paiu, Gol'din, Ozturk and others before the dimensions of the areas and what they would include started to take shape. Participants kept referring back to the evidence and the IMMA Secretariat members ensured that the criteria were kept firmly in mind. Regarding the overlapping area in the eastern part of Subregion 1 with Subregion 3, there was divided opinion on the value of identifying a large area based on a single survey and the fact that part of the area was off limits for scientific research. It was decided to try to make an AoI there that could go forward and that it would be proposed by the wider group to avoid any political concerns if one individual were to be the point of contact. After discussion, with Notarbartolo di Sciara and Hoyt reminding participants that our process was biocentric and non-political, and that in a few years, things could change and more research could well occur in this area, Gurielidze agreed that this would be useful then to suggest an AoI to go forward.

Gill Braulik from the IMMA Secretariat brought up the idea again about the various areas in the Caspian Sea in varying states of use. Some areas, such as the haul outs in the north east, were abandoned due to disturbance but might well be useful if put on the map. Goodman wondered how the IMMA process had handled this in other regions. How important are historic habitats? Tetley said there was no precedent or rule and no clear guidance. It was up to the experts to use their best available knowledge to present cases that could meet the IMMA selection criteria, and develop arguments for such areas for the review panel's considerations. As a guide it was proposed that an area abandoned within 5-10 years might still have active value as potential seal habitat. Notarbartolo di Sciara thought inclusiveness, being more generous, was a good strategy. Braulik said that matched the thinking in Group 4, that 'underlying qualities' for B2 Criterion were still there. Goodman agreed this was a good move and reiterated that for most sites, seals were in the vicinity, just that they were unable to use the haul outs. He said that it was important for the seals to have haul outs to be able to rest but shipping traffic and other land-based disturbance had driven them away. In Kazakhstan, fishermen harassed the seals or drove them away. But if this harassment could be controlled, the seals would return. Karryyeva and Gozel Orazdurdyyeva both agreed that Group 4 should include these habitats for Caspian seals, but Maria Solovyeva said that perhaps the abandoned areas should be from the past 10 years and not given the highest category — possibly an AoI instead of a cIMMA. Orazdurdyyeva noted that they made reviews every 10 years for the Red Data book, like the timetable for the planned IMMA review process, so this could coincide. Tetley pointed out that there have been extraordinary workshops to review or complete IMMA work on shorter time scales, such as with Mediterranean monk seals, held alongside the European Cetacean Society meetings. Thus, it could be possible to hold a review workshop earlier if needed. Panigada, in conclusion, pointed out that it was up to the regional coordinator to follow up on this and keep the IMMA Secretariat apprised.

Panigada then asked Zanardelli to present the results from the previous day in terms of the number of candidate IMMA submissions for each subregion and AoI. The preliminary total was 26 cIMMAs and 5 AoI across the four subregions. Panigada pointed out that there would need to be a polygon for each of these and that Lanfredi and Tetley would invite each person to the GIS room, or they could spend time in the individual subregion rooms to work things out. He reminded participants that they could contact others outside the workshop to retrieve data or seek advice to inform their work. In Group 2, Paiu had created a subgroup within Canvas, sent invites and uploaded materials.

Next Tetley gave a concise presentation to guide the groups through the drafting process. He showed the IMMA template and said that by the end of the workshop every cIMMA proposal needs to have a completed template and a map, with one template filled out for each IMMA.

Step-by-step, he walked the group through the form, giving instructions on how to submit messages and forms. He said that the text in the forms should have references and that personal communications are fine at this stage of the process. The forms are not the equivalent of scientific papers, however the reviewers are aware that these submissions are being prepared quickly and are not going to be written perfectly. Tetley said that all of his instructions were available in the tutorial <u>videos</u> on Canvas, so participants could refer to those as needed and for more information.

Questions followed which clarified the time limit as the end of the working day on Friday. Tetley said that the Secretariat would consider extensions if necessary.

Panigada said that most of the rest of the week had been reserved for drafting sessions. Before leaving plenary, however, he said that drafting could continue until lunch in an hour and a half, and then the rooms would be kept open during and after lunch until plenary resumed at 15:15 UTC for a catch up. He asked Politi to open the breakout rooms and the 28 participants were automatically assigned to the four rooms as before.

At 15:15 UTC, Panigada reconvened the group in plenary to get updates on the draft and find out if there were any questions or concerns. Each of the four coordinators reported on progress which was steady in all the rooms. Panigada reminded participants to liaise with their colleagues and to give any changes in the names of cIMMA proposals to Zanardelli who was keeping the list of names updated. Canvas was available for further Q&A, and Panigada closed the plenary for the day.

IMMA Workshop Day 4, 25 February 2021

Panigada opened the Day 4 plenary with 27 participants saying that this would be a day to focus on drafting the cIMMA templates. He encouraged participants to share drafts so that the best possible candidate IMMAs could be put forward.

The Caspian Sea Group 4 carried on with their work in the break-out room while the majority of Black Sea participants stayed in plenary and engaged in a technical discussion to ensure that the CeNoBS² aerial survey data which surveyed large areas of the Black Sea was included in the proposals and that there weren't discrepancies between the application of data in the western part of the Black Sea with the northern and southern part (Groups 1-3). Indeed, to some extent this dataset was included in the western part, but not at all in the southern part

² The CeNoBS project, funded by the EU and in collaboration with ACCOBAMS (the CMS regional treaty for the Mediterranean and Black Seas), has the goal of assessing cetacean populations as well as human activities that impact biodiversity such as fisheries and underwater noise in the Black Sea.

and only partly in the northern. Panigada pointed out that it was basin-wide recent data so it would be good to use it. Also there was a question of how best to draw the borders based on the data. Lanfredi proposed various options with different boundaries in the western part which overlapped the northern and the southern until most people were happy. First groups 1 and 2 were worked out in terms of the boundary and what to include, then groups 2 and 3. The various summer and winter distributions of the three main species were discussed. For example, Gol'din said that according to the aerial survey results, up to 60 m depth was well used by bottlenose dolphins and harbour porpoises but that beyond 60 up to 200 m depth represents the most important harbour porpoise habitat and that it could extend up to 300 or even 400 m depth. The common dolphin, by contrast, was in deeper waters and in other parts of the Black Sea but not in the North. Paiu pointed to the fact that CeNoBS had revealed hotspots for bottlenose dolphins and harbour porpoises on the slopes. Gol'din pushed for the idea of drawing the line to fit the CeNoBS aerial data but with some reference to bathymetry. Finally, the various cIMMA areas were decided jointly with region 2 having 4 cIMMA proposals while region 3 had 10 cIMMA proposals.

The three groups went back to their break-out rooms assisted by Lanfredi who moved from room to room to help with the cIMMA map proposals, while the Caspian Sea group continued with Tetley's help for the GIS proposals there, before he turned to Region 1 to help put together the maps for their proposals.

After lunch break, Panigada called for an update from the breakout rooms. In a brief plenary, groups 1 and 2 said they were still discussing things and group 3 was continuing drafting but still needed to discuss with group 1 the addition of the potential AoI opposite Abkhazia and extending north and south into Russian and Georgian waters. There was definitely not enough information to make this a cIMMA proposal. With input from the Russians and Georgians the potential polygon for this area was prepared by Lanfredi. Group 4 reported that their work on the Caspian Sea was coming together. It was looking like there would be in total 23 or 24 candidate IMMA proposals.

IMMA Workshop Day 5, 26 February 2021

Panigada welcomed the group, now 28 participants, and said that it would be mostly writing this morning to complete the cIMMA proposals. He said that later Hoyt and Notarbartolo di Sciara would talk about conservation concerns and other matters but for now we would just have a short announcement from the Task Force co-chairs before we launch into the breakout rooms again.

Hoyt told the group that everyone attending the workshop would form part of the ongoing IMMA regional group and that worldwide, there were now more than 200 scientists supporting the further IMMA implementation work from six previous regions where IMMAs have been identified. Hoyt reminded the group about the regional coordinator role and said that two people had come forward, Gol'din for the Black Sea and Shumeyko for the Caspian Sea. He asked if anyone else wanted to come forward. Paiu then volunteered to share the role with Gol'din who agreed that this was a good idea. The three regional coordinators were then selected, agreed and congratulated. It was encouraged for the group to work through their regional coordinators to present conservation concerns, report IMMA news and other developments that could assist the work of the Task Force.

To sharpen the summaries that participants were preparing on the cIMMA template forms, Braulik walked participants through the Task Force IMMA website and the public IMMA e-Atlas to remind them where their IMMAs would go and how they could be easily accessed by everyone. She stressed the value of the summaries and noted the large number of downloads.

Next Politi explained that there would be a questionnaire after the workshop for participants to rate the value of Zoom, Canvas and the overall organisation and planning of the first virtual IMMA workshop.

Panigada then brought up the CeNoBS data again, following on from the previous day's discussions, and Lanfredi showed the map with two large polygons in the western and eastern part of the Black Sea. Gol'din thought this made sense in view of the data and agreed to draft it and then circulate to colleagues. For the eastern area, Shpak noted that it was based on only one flight and that should be noted. It was generally agreed that a single survey, although a good one, was still just a single survey and could merit AoI category but not an IMMA. More surveys were needed to defend a criterion in support of creating a cIMMA.

Then Panigada called upon Lanfredi and Zanardelli to present the list of candidate IMMAs and AoI for each subregion. The participants went over the list and made small edits to the names as we went along.

Subregion I - Turkish Straits System and Southeastern Black Sea

6 cIMMA (or 5 cIMMA and 1 AoI)

Subregion II - Western Black Sea

4 cIMMA

Subregion III - Northern Black Sea and Sea of Azov

10 cIMMA

3 AoI

Subregion IV - Caspian Sea

4 cIMMA

1 AoI

This made a total of 23 or 24 cIMMA and 4 or 5 AoI; there were still some issues to be settled regarding the large offshore area in the eastern Black Sea. After the day's work, the areas would be revisited in plenary one last time.

Panigada then called for a workshop photo, to be taken with cameras on, if possible. Several screenshots were then taken and the best one adopted (Fig. 6).



Fig. 6 Some of the participants at the 7th IMMA Workshop on the final day

After a full day of drafting, at UTC 15.00, Panigada reconvened in plenary and asked the facilitators for each of the four regions to give a brief account of where things stood in their group, one by one.

Subregion 1 had reduced their cIMMAs from 6 to 5, including one area suggested to form a larger polygon connected to Subregion 2. They were nearly finished with drafting.

Subregion 2 had only 4 cIMMA and were also nearly finished.

Subregion 3 had 10 cIMMA and 3 AoI to complete but only 3 researcher participants in the group. Five cIMMAs were complete and the 6th was nearly there, while work had started on the others. Three sites were being prepared by Shpak and Glazov but could not be completed due to commitments for the imminent Russian Holarctic conference which they were helping to organise and participate in. It was therefore agreed that there could be a special extension for the two Russian scientists but only until 19 March. All others were asked to complete their proposals today if possible with the following Monday being the last day for submission. The multi-country Offshore Eastern Black Sea AoI was added to the total for this subregion.

Subregion 4 had 4 cIMMA and 1 AoI

The final totals and names used were as follows:

Subregion I - Turkish Straits System and Southeastern Black Sea

5 cIMMA

- 1. Turkish Straits System and Prebosphoric cIMMA
- 2. Sakarya Canyon cIMMA
- 3. Sinop cIMMA
- 4. Samsun to Hopa cIMMA
- 5. Colchis cIMMA

Sub Region II - Western Black Sea

4 cIMMA

- 1. Kaliakra to Danube Delta cIMMA
- 2. Emona cIMMA
- 3. Ropotamo and Strandzha cIMMA

4. Western Black Sea cIMMA

Sub Region III - Northern Black Sea and Sea of Azov

10 cIMMA

- 1. Karkinit and Dzharylhach Gulfs cIMMA
- 2. Balaklava and the Southern Crimean cIMMA
- 3. Waters west to the Kerch Strait cIMMA
- 4. Karadag and the South-eastern Crimean cIMMA
- 5. Kerch Strait and Taman Bay cIMMA
- 6. Anapa-Utrish cIMMA
- 7. Tendra and Yahorlyk Bays cIMMA
- 8. Gelendzhik cIMMA
- 9. Sochi cIMMA
- 10. Sea of Azov cIMMA

3 AoI

- 1. Zernov Phyllophora Field Zakaznyk AoI
- 2. Psou to Enguri AoI
- 3. Offshore Eastern Black Sea AoI

Subregion IV - Caspian Sea

4 cIMMA

- 1. Caspian Seal Breeding cIMMA
- 2. Caspian Seal Moulting and Haul Out cIMMA

- 3. Caspian Seal Movement Corridor and Feeding cIMMA
- 4. Caspian Seal Summer Feeding cIMMA
- l AoI

1. Caspian Seal Potential and Former Haul Out Sites AoI

Lanfredi and Tetley continued to work with specific participants to complete the polygons for these areas in order to present the completed map to the workshop. Meanwhile Panigada called upon Hoyt and Notarbartolo di Sciara to talk about what's next as well as conservation concerns.

Hoyt asked if anyone wanted to put on the record their conservation concerns to note for the report. He spoke about what the Task Force had seen through the IMMAs identified in the southern hemisphere over the previous four years. In view of this, the identification of candidate IMMAs in the Black and Caspian seas — creating these new sites based on the latest data in this collaborative, robust process under the umbrella of the IUCN — will be something that offers leverage toward influencing governments to take action.

Hoyt pointed out that the Task Force had an implementation component following the identification of IMMAs in the Pacific Islands, the North East Indian Ocean and the Western Indian Ocean. A small group led by the two Task Force co-chairs spent an intensive week to ten days, in successive years, working on the ground in Palau, the Andaman Islands of India and in southern Mozambique. In each area, they met with stakeholders and developed an Action Plan to go forward with marine mammal conservation based on the IMMAs identified. Different approaches were undertaken in each of the three areas, but in each case, government departments were approached and engaged to present these plans.

In Mozambique, Hoyt said that, along with various stakeholders, he and Notarbartolo di Sciara were advising strong further protection for the last viable dugong population in East Africa. Working with local scientists and conservationists, they placed articles with influential South African media, and announced their efforts at the annual meeting of the Society for Marine Mammalogy (SMM) and European Cetacean Society at the World Marine Mammal Conference December 2019 in Barcelona. Then they worked on a letter from the SMM President to commend the Mozambique government for the Bazaruto Archipelago National Park which covers 30% of the 250-350 dugongs left, while recommending that the recently identified Bazaruto Archipelago to Inhambane Bay IMMA should become an Environmental Protection Area. That would protect the rest of the dugongs—as well as Indian Ocean humpback dolphins, humpback whales, sea turtles, manta rays and whale sharks—all of which comprise Mozambique's drive for a blue economy. A few months later the South African energy company SASOL which held oil & gas leases in the prime dugong area, returned their leases to the government.

Goodman expressed his appreciation of the IMMA process and how it allowed the Caspian seal researchers to consolidate previous work and to present their conservation initiatives through the IUCN Task Force channels to a much larger audience. He agreed to help promote the work related to the Caspian Sea, once the IMMAs are approved.

Braulik explained the review process to the participants and gave an idea of the timeline, saying that the reviewers would often ask for more information or clarification, but that this wouldn't come now for a couple months at least.

Panigada then asked Zanardelli and Lanfredi to present the polygons with the summary numbers of IMMAs and AoI. The final result from the workshop was 23 cIMMAs to go forward for review with 4 AoI to be kept for the e-Atlas.

Hoyt, Notarbartolo di Sciara and Panigada took turns thanking the participants for all their work, the region's coordinators Shumeyko, Gol'din and Paiu for coming forward to volunteer, to the two translator-interpreters Spurgeon Vasanthakumar and Jenny Mercer. Hoyt thanked Panigada for his chairing duties, and Politi for her work to prepare Canvas and the Zoom arrangements and to work throughout the meeting to help make things run smoothly. The sponsors were thanked: GOBI with the German government's International Climate Initiative (IKI) and the MAVA Foundation. Panigada apologized to the group that we had to end the sessions in Zoom where normally for an IMMA workshop we would be going to a fine restaurant to celebrate the week's work. Participants were encouraged to toast their successful collaboration at the workshop and the success of our efforts going forward.

Annexes

Annex I – List of participants

Black Sea participants

Aylin Akkaya DMAD-Marine Mammals Research Association Antalya, Turkey

Davit Dekanoidze Institute of Ecology Ilia State University Tbilisi, Georgia

Ertug Duzgunes Karadeniz Technical University Trabzon, Turkey

Elena Gladilina Ukranian Scientific Center of Ecology of the Sea (UkrSCES) Odesa, Ukraine

Dmitri Glazov Laboratory of Behaviour and Behavioural Ecology of Mammals A.N. Severtsov Insitute of Ecology and Evolution of the Russian Academy of Sciences Moscow, Russian Federation

Pavel Gol'din I. I. Schmalhausen Institute of Zoology Kyiv, Ukraine

Zurab Gurielidze Ilia State University Tbilisi, Georgia

Natia Kopaliani Program for the Ecology and Conservation of Large Mammals Ilia State University Tbilisi, Georgia Levan Ninua Ilia State University Tbilisi, Georgia

Uğur Özsandıkçi Sinop University Sinop, Turkey

Ayaka Amaha Ozturk Turkish Marine Research Foundation (TUDAV) Istanbul University Istanbul, Turkey

Marian Paiu Mare Nostrum NGO Constanța, Romania

Marina Panayotova Institute of Oceanography — BAS Varna, Bulgaria

Dimitar Popov Green Balkans NGO Plovdiv, Bulgaria

Olga V. Shpak Laboratory of Behaviour and Behavioural Ecology of Mammals A.N. Severtsov Insitute of Ecology and Evolution of the Russian Academy of Sciences Moscow, Russian Federation

Costin Timofte Mare Nostrum NGO Constanța, Romania

Arda Tonay Turkish Marine Research Foundation (TUDAV) Istanbul University Istanbul, Turkey

Caspian Sea participants

Simon Goodman School of Biology University of Leeds Leeds, UK

Maria Solovyeva Laboratory of Behaviour and Behavioural Ecology of Mammals A.N. Severtsov Institute of Ecology and Evolution of the Russian Academy of Sciences Moscow, Russian Federation

Susan C. Wilson Tara Seal Research Killyleagh, Co. Down, Northern Ireland, UK

Mirgaliy Baimukanov Institute of Hydrobiology & Ecology (IHE) Karasaysky Raion Almaty, Kazakhstan

Nataliya Shumeyko A.N. Severtsov Institute of Ecology and Evolution Russian Academy of Sciences and KASPIKA Caspian Seals Conservation Agency Moscow, Russian Federation

Eldar Rustamov Ramsar Regional Initiative of Central Asia (RRI-CA) Ashgabat, Turkmenistan

Shirin Karryyeva Central Asian Desert Initiative (CADI) Ashgabat, Turkmenistan

Sultan Ryskulov Institute of Hydrobiology & Ecology (IHE) Karasaysky Raion Almaty, Kazakhstan Dmitri Glazov [also participated and listed above for the Black Sea]

Observers

Mateusz Benko Tehran Convention Secretariat United Nations Environment Program (UNEP) Geneva, Switzerland

Robert L. Brownell, Jr. Granite Canyon Laboratory Southwest Fisheries Science Center Monterey, CA, USA

David Johnson SeaScape Consultants Global Ocean Biodiversity Initiative (GOBI) Romsey, UK

Irina Makarenko Secretariat, Commission on the Protection of the Black Sea Against Pollution Istanbul, Turkey

Catherine Numa IUCN – Key Biodiversity Areas (KBAs) Málaga, Spain and Gland, Switzerland

Gozel Orazdurdyyeva Tehran Convention Ministry of Nature Protection of Turkmenistan 744000, Ashgabat, Turkmenistan

Andrew Plumptre IUCN – Key Biodiversity Areas (KBAs) Gland, Switzerland

Susana Salvador Secretariat, ACCOBAMS Monaco Mahir Aliyev [video only, did not attend] Interim Secretariat of the Tehran Convention United Nations Environment Program (UNEP) Geneva, Switzerland

Translators/ Interpreters

Jennifer Mercer University of St Andrews St Andrews, UK

Spurgeon Vasanthakumar University of St Andrews St Andrews, UK

IMMA Secretariat

Gill Braulik IUCN Marine Mammal Protected Areas Task Force St. Andrews, Scotland, UK

Erich Hoyt IUCN Marine Mammal Protected Areas Task Force Whale and Dolphin Conservation Chippenham, Wiltshire, UK Caterina Lanfredi IUCN Marine Mammal Protected Areas Task Force Tethys Research Institute Milano, Italy

Giuseppe Notarbartolo di Sciara IUCN Marine Mammal Protected Areas Task Force Tethys Research Institute Milano, Italy

Simone Panigada IUCN Marine Mammal Protected Areas Task Force Tethys Research Institute Milano, Italy

Elena Politi IUCN Marine Mammal Protected Areas Task Force Tethys Research Institute Milano, Italy

Michael J. Tetley IUCN Marine Mammal Protected Areas Task Force Isle of Mull, Scotland, UK

Margherita Zanardelli IUCN Marine Mammal Protected Areas Task Force Tethys Research Institute Milano, Italy

Annex II – Workshop agenda

MARINE MAMMAL PROTECTED AREAS	
NON TASK PORCE	ІММА

IMMA Regional workshop Black Sea, Turkish Straits System and Caspian Sea Region online edition 22 - 26 February 2021

•				22 - 20 rebruary 2021			
Timeline (UTC time)		Topics		Activity			
17 - 22 February	Available from February 17	self-paced Canvas	video tutorials + readings				
		Introduction to the IMMA Black Sea, Turkish Straits System and Caspian Sea Region Workshop					
	8.30 - 10.00	Presentation - Erich Hoyt and Giuseppe Notarbartolo di Sciara (IUCN Joint SSC/WCPA Marine Mammal Protected Areas) Presentations by observers Participants introduction Adoption of the agenda and workshop Chair	live Zoom	plenary session			
	10.00 - 10.30	break					
February 22	10.30 - 11.00	Inventory of Knowledge (IoK) for BSCSEA - Simone Panigada (IUCN Joint SSC/WCPA Marine Marimal Protected Areas)	live Zoom	plenary session			
	11.00 - 12.30	Question & Answers on IMMA Selection Criteria, Identification Process, and Inventory of Knowledge (IoK)	live Zoom	Q&A			
	12.30 - 14.00	break					
		Areas of Interest and assignment of working groups					
	14.00 - 14.30	Collated pAol for the Black Sea, Turkish Straits System and Caspian Sea Region - Caterina Lanfredi (IUCN Joint SSC/WCPA Marine Mammal Protected Areas)	live Zoom	plenary session			
	14.30 - 15.30	Discussion on candidate IMMA (cIMMA) options and agreement on pAoI list for cIMMA investigation	live Zoom	plenary session			
	15.30 - 17.30	Forum on Canvas for questions and comments	self-paced Canvas	Q&A			
	7.30 - 8.30	Forum on Canvas for questions and comments	self-paced Canvas	Q&A			
	8.30 - 10.00	Opening of the day - collation of final pAoI and cIMMA Group Assignments	live Zoom	plenary session			
February 23	10.00 - 10.30	break					
		Assignment of cIMMA list					
	10.30 - 13.00	Breakout Group Session 1	live Zoom	breakout rooms			
	13.00 - 14.30	break		1			
	14.30 - 15.30	Assessment of cIMMA list (Sub-region summary) - Discussion and revised pAoI list / updated cIMMA list	live Zoom	plenary session			
	15.30 - 17.30	Forum on Canvas for guestions and comments	self-paced Canvas	Q&A			

continued...

Timeline (UTC time) Topics		Type of attendance	Activity	
	7.30 - 8.30	Forum on Canvas for questions and comments	self-paced Canvas	Q&A
	8.30 - 8.45	Opening of the day	live Zoom	plenary session
	8.45 - 10.15	Breakout Group Session 2	live Zoom	breakout rooms
	10.15 - 10.45	break		
	10.45 -12.00	Assessment of cIMMA list (Sub-region summary) - Guidelines for drafting sessions	live Zoom	plenary session
February 24	12.00 - 13.30	break	T	
		Drafting cIMMA submission form		
	13.30 - 15.15	Drafting Session 1	live / self-paced	individual work / breakout rooms
	15.15 - 15.30	Review of cIMMA drafting process	live Zoom	plenary session
	15.30 -17.30	Forum on Canvas for questions and comments	self-paced Canvas	Q&A
	7.30 - 8.30	Forum on Canvas for questions and comments	self-paced Canvas	Q&A
	8.30 - 8.45	Opening of the day	live Zoom	plenary session
	8.45 - 11.00	Drafting Session 2	live / self-paced	individual work / breakout rooms
Enhrunny 25	11.00 - 11.30	break	<u>.</u>	
r coroary 20	11.30 - 13.30	Drafting Session 3	live / self-paced	individual work / breakout rooms
	13.30 - 14.30	break		
	14.30 - 15.00	Review of cIMMA drafting process	live Zoom	plenary session
	15.00 - 17.00	Forum on Canvas for questions and comments	self-paced Canvas	Q&A
February 26	7.30 - 8.30	Forum on Canvas for questions and comments	self-paced Canvas	Q&A
	8.30 - 8.45	Opening of the day	live Zoom	plenary session
	8.45 -11.30	Drafting Session 4	live / self-paced	individual work / breakout rooms
	11.30 - 12.30	Review of cIMMA drafting process and next steps	live Zoom	plenary session
	12.30 - 13.30	break		
		Discussion on the use of IMMAs in the Black Sea, Turkish Straits System and Caspian Sea Region		
	13.30 - 15.30	Final round-up by IMMA Secretariat * IMMAs and regional conventions and agreements * Conservation concerns in the Black Sea, Turkish Strats System and Caspian Sea Region * Normation of Regional Coordinators * Summary of recommendations by the workshop participants * Closure of the workshop and acknowledgements	live Zoom	plenary session

Annex III – Template for candidate IMMAs and IMMAs³

cIMMA & IMMA Template

IMMA Submission Form INSTRUCTIONS:

The following template should be used to complete information for submission of a **candidate Important Marine Mammal Area (cIMMA)** and for the final text of an **approved IMMA**.

The text should be as complete and polished as possible. The fields included in this form reflect those that are presented to the public for each IMMA on the IMMA website (<u>www.marinemammalhabitat.org</u>), and is also used for creating PDF Factsheets that can be downloaded from each IMMA portfolio page (see <u>Hellenic Trench IMMA</u> for example). As such, ensuring that the text provided on this form is of high quality will increase the likelihood of a successful submission and will mean less work is required to polish the text for publication online.

Species - Please follow the list of marine mammal species officially recognised by the Society for Marine Mammalogy's Committee on Taxonomy: <u>https://marinemammalscience.org/science-and-publications/list-marine-mammal-species-subspecies/</u>. Use the common name followed by the scientific name the first time you mention the species, and the common name from that point onward (lower case unless including a proper noun) from the Taxonomy List.

- IMMA Name Use a title that is short, interesting, descriptive or memorable and that describes the area within the IMMA. Avoid easily confused names such as 'Southern Australia coast IMMA' and use instead names that refer to distinctive features that will be unique and distinctive.
- Point(s) of Contacts please list all parties who were involved in the drafting of the cIMMA submission (this is for internal reference only and is not displayed online).
- 1. Description of IMMA please provide information on the geography, location, bathymetry, oceanography, and habitat within the IMMA. Information on protective measures (e.g. MPA's etc) and other designations to the area (e.g. EBSA, KBA etc) can also be provided here as well as other information giving useful background.
- > 2. Summary Table of Species and Criteria –

<u>Table 1 - Qualifying Species Table</u>. Please complete the table for all species meeting the IMMA criteria and note which criteria are met by marking with an X. Where D2, Diversity, is applied the list of species may be long. <u>Table 2 - Supporting Species Table</u>. Please complete the table to include all marine mammal species recorded within the IMMA that are not already listed in the Primary Species Table. These may be less commonly recorded species for which information is insufficient to satisfy one of the IMMA criteria – do not include vagrants, or very rare species.

- 3. Justification of IMMA Criteria text please provide specific descriptions of why the various criteria were met for the relevant species within the IMMA along with cited references. If peer-reviewed journal articles are not available, use reports from reputable sources, preferably those that can be publicly accessed. Do not repeat the information presented in the previous Description of IMMA section.
- 4. Summary of IMMA please ensure that the summary (i.e. abstract) for the IMMA is no longer than 150 words. This text should summarise the submission including information on the location, geography and habitat, marine mammal species, and criteria used in the IMMA submission. See here details of how to prepare a strong IMMA Summary.
- 5. References please provide a full list of references that were cited in the text of the IMMA submission –use the 'Harvard system' format. See the IMMA Reference Format Document for more details and examples.
- Annex Supporting Figures, Maps and Images please provide any figures, images, graphs or maps for inclusion in the IMMA submission, either by pasting directly into the document or by pasting a URL link to the Figure. These may be taken from published papers or be unpublished material. Please provide a legend describing each figure. These

³ Note: Table numbers listed in Annex 3 refer only to tables within this annex.

materials strengthen cIMMA submissions considerably. The material will not be displayed in the online portfolio but can be used in the downloadable IMMA Fact sheets.

Submission Type: Candidate IMMA / Final IMMA Submission

[Delete as applicable - indicating whether this is a cIMMA or Final IMMA submission]

cIMMA/IMMA Name:

[Short, interesting, descriptive or memorable name that describes the area or species within the cIMMA/IMMA].

Point(s) of Contacts

[please list all parties who were involved in the drafting of the IMMA submission - these are for internal use only and will not be published] [Name, Affiliation/Organization, Contact Email] [Name, Affiliation/Organization, Contact Email] [Name, Affiliation/Organization, Contact Email]

1. Description of Habitat

[A description, with supporting scientific references, of the location, physical geography, oceanographic and biological processes within the IMMA that make it important for marine mammals. Information on existing protective measures and jurisdiction may also be added]

2. Summary Table of IMMA species and qualifying criteria

Table 1: Qualifying Species – species that satisfy the criteria to qualify the area for IMMA status. All species and criteria need to be justified in the text below under the relevant section).

	Scientific	Common	Population/Sub-	IUCN Red List Status	IMMA Selection Criteria Met (x)							
U	Name	Name	population Name		Α	B1	B2	C1	C2	C3	D1	D2
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

Table 2: Supporting Species – species present in the area but which do not meet at least one of the IMMA criteria. Do not include vagrant or extremely rare species.

ID	Scientific Name	Common Name	Population / Subpopulation Name	IUCN Red List status	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					

IMMA Map

[simple boundary map of the IMMA location] [prepared by IMMA Secretariat]

3. Justification of IMMA Criteria

Criterion A – Species or Population Vulnerability

[Detailed description and careful explanation as to how this criterion is met for each qualifying species. Each species detailed here should also be listed in Table 1 under Criterion A.

[only required if the area meets the above criterion]

Criterion B1 - Small and Resident Populations

[Detailed description and careful explanation as to how this criterion is met for each qualifying species. Each species detailed here should also be listed in Table 1 under Criterion B1]

[only required if the area meets the above criterion]

Criterion B2 – Aggregations

[Detailed description and careful explanation as to how this criterion is met for each qualifying species. Each species detailed here should also be listed in Table 1 under Criterion B2]

[only required if the area meets the above criterion]

Criterion C1 – Reproductive Areas

[Detailed description and careful explanation as to how this criterion is met for each qualifying species. Each species detailed here should also be listed in Table 1 under Criterion C1]

[only required if the area meets the above criterion]

Criterion C2 – Feeding Areas

[Detailed description and careful explanation as to how this criterion is met for each qualifying species. Each species detailed here should also be listed in Table 1 under Criterion C2]

[only required if the area meets the above criterion]

Criterion C3 – Migration Routes

[Detailed description and careful explanation as to how this criterion is met for each qualifying species. Each species detailed here should also be listed in Table 1 under Criterion C3]

[only required if the area meets the above criterion]

Criterion D1 – Distinctiveness

[Detailed description and careful explanation as to how this criterion is met for each qualifying species. Each species detailed here should also be listed in Table 1 under Criterion D1]

[only required if the area meets the above criterion]

Criterion D2 – Diversity

[Describe the species that regularly occur in the IMMA that can contribute to meeting this criteria. Note that vagrant species or those for which only isolated records are

available should not be listed here (but can be listed in Table 2). Each species detailed here should also be listed in Table 1 under Criterion D2]

[only required if the area meets the above criterion]

4. IMMA Summary

[Please write an abstract for your submission. This should be less than 150 words and provide details of the importance of the IMMA to marine mammals, some information on the habitat in the IMMA, and brief details of the criteria used to define the IMMA. This should be well crafted text as it will be the first information seen by most users of the IMMA website]. See here for more details on <u>correctly writing and</u> <u>formatting an IMMA Summary</u>.

5. References and other supporting literature

[Create a reference list of all materials cited in the text to support this submission. These may include scientific papers, books, reports, links to websites or databases. Please ensure references are complete with Authors, Date, Title, Journal/Publisher, Issue, Pages]. For more details see <u>IMMA Reference Format document</u>.

Annex 1. Supporting Figures or Maps

[Use this space to add supporting information to your submission, along with relevant sources and captions. These might include information taken from published papers etc such as figures, distribution maps, sighting locations, data tables, graphs, images etc which support the submission of the IMMA. These can add considerable weight to submissions and later be used in the development of downloadable IMMA factsheets]

Annex IV - List of approved IMMAs and cIMMAs

The workshop started with 53 preliminary Areas of Interest (pAoI) from the Black Sea and Turkish Straits System and 20 pAoI came from the Caspian Sea. Of the total 73 pAoI—32 of them were submitted by invited experts, 14 were marine protected areas (MPAs) in the World Database of Protected Areas, 24 were Ecologically or Biologically Significant Areas (EBSAs) identified under the Convention on Biological Diversity, and 3 areas had been identified as Cetacean Critical Habitats (CCH) through the Convention on Migratory Species regional ACCOBAMS agreement. Added to these 73 pAoI, there were 19 submitted on the first day of the workshop. One by one, these 92 pAoI were considered in the breakout groups and in plenary, utilizing dedicated selection criteria to support identification in the expertbased process. Many of the pAoI were overlapping but provided useful additional information. During the workshop, the group merged some areas and deferred many others, and then prepared cIMMA submissions, proposing boundaries and detailing how each one met the various IMMA criteria. By day 5 of the workshop, 23 areas were recommended to go forward as candidate IMMA (cIMMA) proposals to the review panel, while 4 areas would stay as Areas of Interest (AoI) because of limited supporting data.

Following review and subsequent revisions in many cases, 14 areas were accepted as IMMAs with 1 area remaining as a cIMMA, subject to additional data or clarifications needed to pass review in future. The other cIMMAs that did not pass review reverted to AoI status with the recognition that these areas will be monitored and with additional research could become cIMMAs at a future IMMA expert workshop. The total number of AoI going forward is 11 (see Annex V). For IMMAs and cIMMAs, a summary of the supporting rationale and background information is now available on the Task Force IMMA website (marinemammalhabitat.org). The titles of the 14 approved IMMAs and 1 cIMMA are listed below:

Black Sea and Turkish Straits System

- 11 IMMA and 1 cIMMA
- 1. Balaklava and the Southern Crimea IMMA
- 2. Colchis IMMA
- 3. Emona IMMA
- 4. Kaliakra to Danube Delta IMMA
- 5. Karkinit and Dzharylhach Gulfs IMMA

- 6. Kerch Strait and Taman Bay IMMA
- 7. Sea of Azov IMMA
- 8. Sinop IMMA
- 9. Turkish Straits System and Prebosphoric IMMA
- 10. Karadag and Opuk IMMA
- 11. Western Black Sea IMMA
- 12. Samsun cIMMA

Caspian Sea

3 IMMA

- 1. Caspian Seal Breeding Area IMMA
- 2. Caspian Seal Moulting and Haul Out Areas IMMA
- 3. Caspian Seal Transitory Migration and Feeding Area IMMA

Annex V – List of AoI for future consideration

After consideration of the 92 preliminary Areas of Interest (pAoI) summarized in the AoI report with some added during the workshop, submission forms were then prepared for 23 candidate IMMAs (cIMMAs). During the workshop it was determined that 4 areas would become AoI. The reviewers rejected a number of cIMMA proposals, leading to a total of 11 AoI to go on the e-Atlas. AoI status means that these 11 areas can be used to facilitate and focus future monitoring and research activities on marine mammals in the region. This enhanced activity could provide additional evidence for these AoI to be reconsidered as IMMA candidates during future iterations of the IMMA identification process and Regional Expert Workshops. Besides being mapped in the Task Force IMMA e-Atlas on the website (marinemammalhabitat.org), these 11 AoI are shown in Fig. 1. The titles of the AoI are as follows:

Black Sea, Turkish Straits System and Caspian Sea

11 AoI

- 1. Sakarya Canyon AoI
- 2. Tendra and Yahoriyk Bays AoI
- 3. Anapa-Utrish AoI
- 4. Gelendzhik AoI
- 5. Sochi AoI
- 6. Kizlyar Bay AoI (Caspian Sea)
- 7. Psou to Enguri AoI
- 8. Zernov Phyllophora Field Zakaznyk AoI
- 9. Hirkan and Shirvan AoI (Caspian Sea)
- 10. Offshore Eastern Black Sea AoI
- 11. North-western Black Sea AoI

Annex VI – Results of questionnaire on the use of Zoom and Canvas to run the Black Sea, Turkish Straits System and Caspian Sea IMMA Workshop

Due to the Covid-19 pandemic with the global lockdowns, restricted travel and the difficulty of holding in-person meetings, the IMMA Secretariat proposed and sought permission from GOBI-IKI and MAVA Foundation sponsors to hold an IMMA Zoom workshop in the Black Sea, Turkish Straits System and Caspian Sea. The schedule, organised through Canvas (Fig. 7), was similar to the previous in-person workshops.



Fig. 7. The Canvas system was used to organize the Workshop schedule, to provide links to videos, papers and live plenary sessions.

At the close of the workshop, a questionnaire was prepared to determine which aspects of the virtual process had been useful and which could be improved to meet future needs.

Of the approximately 49 total participants, 20 filled out the form resulting in the following indications:

Workshop evaluation

• 90% thought the workshop went well.

• 95% considered the information provided in advance via email and Canvas was sufficiently clear.

• Concerning the IMMA Basic Training Course, 90% of the participants found it very useful or useful, although only 45% of them watched all the videos.

• The IMMA process became clear thanks to the material provided in advance to the 35% of the participants (this means that for 54% of the people who didn't know the process, the information provided in advance was enough clear to understand the process). Only part of the participants (35%) knew already the IMMA identification process (Fig. 8).

• Regarding the plenary sessions and breakout groups sessions, all participants enjoyed both (100%).

Canvas evaluation

• Most of the respondents used Canvas (95%) although the only one negative question appears doubtful, considering the following answers provided by the respondent.

• Concerning the experience on Canvas, 80% of the answers rated the Canvas experience as very positive or positive (scores 1 and 2). However, the percentage of the answers indicating it as an easy-to-use tool decreases to 75% (most of the answers scoring 2). These results suggest that a pre-workshop Canvas introduction meeting, scheduled well in advance, may help participants to use the platform at its best.

• Canvas features were not used in the same way, some of them being found very useful while others not particularly efficient for the workshop. In particular, the Modules (95% for pre-workshop and 100% for the workshop), the Announcements (70%) and the list of People (75%) were the most appreciated features (Fig. 9). Groups and file exchange were found useful by the 70% of the participants. The Groups feature (together with File sharing) should be better developed in advance and explained in a pre-workshop phase, as it seems a potentially useful tool, rather than the generic discussion forums.

• 80% of the answers indicate that Canvas could turn to be useful for in-person workshops.

Zoom and SeaSketch evaluation

• Zoom proved to be a very appreciated platform to conduct virtual meetings, as the 100% of the answers indicated it as a very efficient / efficient tool, both for plenary and breakout rooms sessions.

• Regarding the time spent on Zoom, most of the answers indicate that the 5-days long workshop with less time spent on Zoom with more offline involvement (through Canvas) is preferred (39%), although 33% of the answers indicate that shorter Zoom sessions over a longer time-span (7-10 days) would be better. Only a smaller percentage (22%) suggested longer Zoom sessions over a shorter time-span (<5 days). In particular, 50% indicate that longer breakout group sessions would be more useful (Fig. 10).

• SeaSketch was used by half of the respondents. However, only 31% of the answers indicate it as the easiest way to handle GIS data, 42% indicating QGIS and 26% with no GIS skills (Fig. 11).

The motivations given to the question 'If you did not use SeaSketch, explain why?' are as follows:

- 1. Useful alternatives.
- 2. Because SeaSketch provide very schematic border lines and for other hand, we had the shape file for our sites before.
- 3. Didn't participate in the sessions working on it.
- 4. I am familiar with GIS software.
- 5. Other methods available, no need to learn it.
- 6. Not needed.
- 7. Prefer to use QGIS.
- 8. I did not use it personally; my colleague used it.
- 9. I am more familiar with GIS.
- 10. During this workshop I didn't create maps.

Finally, the three answers collected within the topic 'Comments and suggestions to improve future workshops' are as follows:

- 1. It would be more useful to invite interpreters to understand much better the speakers. There were some participants who do not know English. The translation of volunteers was incomplete.
- 2. First you have my congratulations for making this possible. Second, sure it needs a more comprehensive materials or expert support when it comes to argue the design of an IMMA. There were preconceptions between the participants on how an IMMA should be a large area or a tiny area. This fortunately was explained by the coordinators and through the workshop days and within the workshop materials.

35.0%

3. To meet each other off line.

When you did understand the IMMA process?



Fig. 8 Understanding the IMMA process



Fig. 9 The most useful Canvas features to participants



Fig. 10 Preferences regarding Zoom session length

Which is the easiest way to handle GIS data?



Fig. 11 What is the easiest way to handle GIS data?