**UNITED NATIONS
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MEDITERRANEAN ACTION PLAN**

Meeting of the Ecosystem Approach Correspondence Group on Monitoring (CORMON) Biodiversity and Fisheries

Videoconference, 28-29 March 2022

Agenda item 6: Data Dictionaries and Data Standards for the Common Indicators 3, 4 and 5 related to Species

6.3. Data Dictionaries and Data Standards for Marine Birds

Data Dictionaries and Data Standards for the Common Indicators 3, 4 and 5 related to Marine Birds

SPA/RAC
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In charge of the study at INFO/RAC

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Note by the Secretariat

In the framework of the UNEP/MAP Programme of Work and Budget for 2020–2021 (COP 21, Decision IG.24/14), INFO/RAC, leads the work on the development and completion of the "*Info/MAP platform and platform for the implementation of IMAP fully operative and further developed, connected to MAP components' information systems and other relevant regional knowledge platforms, to facilitate access to knowledge for managers and decision-makers, as well as stakeholders and the general public*".

The **EU funded EcAp-MED II Project (2017-2019)** has supported this output with the development of a Pilot IMAP Compatible Data and Information System (IMAP (Pilot) Info System), that has enabled the Contracting Parties to start reporting data as of mid-2020 for selected **11 IMAP Common Indicators.** The IMAP (Pilot) Info System laid down the basis for building a fully operational IMAP Info System as provided for by Decision IG.22/7.

At present, the system supports the reporting data for 11 of the 27 IMAP Common Indicators, namely Common Indicators **1, 2, 6, 13, 14, 15, 16, 17, 21, 22, 23**. The criteria used for selecting the 11 Common Indicators as part of the IMAP (Pilot) Info System have been: a) maturity of Common Indicators as of 2017, in terms of monitoring experiences and best practices; b) existing data collection and availability representing all IMAP clusters; c) availability of Common Indicators Guidance Factsheets and/or metadata templates.

The draft **IMAP (Pilot) Info System** has been developed by INFO/RAC under the coordination of the Secretariat and in close consultation with all relevant MAP Components. The IMAP (Pilot) Info System is now evolving towards the complete **IMAP Info System** and is able to receive data according to the proposed Data Standards and Data Dictionaries (DSs and DDs) that set the basic information on data reporting within IMAP.

The ongoing process of evolution from the pilot to the final IMAP Info System is also supported by the EU funded project **EcAp MED III** project and include the implementation of Data Standards and Data Dictionaries and the related data flows for the whole set of modules for the IMAP Common Indicators (EO3 and candidate C.I.s currently excluded).

Introduction

Data Standards (DSs) are prepared in the form of Excel spreadsheets in which every column indicates a field to be filled by the data providers. **Data Dictionaries (DDs)** are prepared in the form of Excel spreadsheets in which every row contains information to guide the data provider. DSs & DDs are spreadsheets included in the **same Excel file**, downloadable from the IMAP (Pilot) info system. The data uploaded using the Data Standards will be suitable for the inclusion in the database.

The proposal of DSs and DDs provides broader data sets and associated dictionaries than requested as mandatory by the related IMAP Guidance Factsheets and Metadata Templates. In the Data Standards the mandatory data are represented in black and the **non-mandatory** ones in red. The possibility to fill in also **non-mandatory** fields is given to allow the Contracting Parties that already have monitoring systems in place and collect a wider set of data to report them as the additional data. Although it is at the discretion of the Contracting Parties to decide, reporting on non-mandatory data sets is **strongly encouraged** to avoid knowledge gaps between IMAP and other national data flows.

Following the outcome of CORMONs, the finalized DSs and DDs related to the 11 Common Indicators have been uploaded in the IMAP (Pilot) Info System and the consequent changes to the data base structure have been provided. Therefore, once all the parameters and measurement units have been defined, the correspondent data flow have been activated. Following a testing phase of the IMAP (Pilot) Info System realized with the voluntary participation of interested countries, the **phase I** of the system implementation is officially concluded in June 2020.

After the conclusion of the EcAp MED II Project, discussion about further modules has been started with the thematic MAP Components for each already selected Common Indicator and for the remaining ones in view of the completion of the IMAP Common Indicator set, according to the available resources specifically allocated.

The current document is a revised version of the "draft" DSs & DDs related to **Common Indicators 3, 4 & 5,** reflecting comments received during and after the CORMON Meetings on Biodiversity and Fisheries in 2020 and 2021. The document takes into account also discussion held during the following bilateral meetings with SPA/RAC and the Permanent Secretariat of ACCOBAMS. Inputs and comments collected from the Contracting Parties have been integrated to further elaborate the DSs & DDs and the updated version has been discussed and finalized with the support of the Mediterranean experts of the informal Online Working Group (OWG) on marine birds.

By reviewing this document, the present meeting is expected to provide the final **inputs and further reflections to tune** the standards to timely allow **the implementation of the correspondent data flows** to be ready by June in order to complete the Common Indicator set available for the IMAP call reporting**.**

Nevertheless, given that the development of indicators, monitoring methods and data standards are progressing in parallel, close and continuous dialogue and collaboration are needed among the bodies responsible for these developments to ensure their proper alignment and coherence.

Data Standards and Data Dictionaries for IMAP Biodiversity (EO1): Common Indicators 3,4&5 for Sea Birds

1.   Among five common indicators related to biodiversity (EO1) fixed by IMAP, three are about sea birds:

- Common indicator 3: Species distributional range;

- Common indicator 4: Population abundance of selected species;
- Common indicator 5: Population demographic characteristics (e.g. body size or age class structure, sex ratio, fecundity rates, survival/mortality rates)

2.   The present document aims to present DSs & DDs related to a part of the available methods for monitoring sea bird species as expressly reported in the IMAP guidance factsheets.

3.   The reference documents for the species to be monitored are:

- IMAP Guidelines for monitoring sea birds in the Mediterranean Sea (WG.461/21)
- Guidelines for management and monitoring threatened population of marine and coastal bird species and their important areas in the Mediterranean - SPA/RAC
- Monitoring and assessment scales, assessment criteria, thresholds and baseline values of the common indicators 3,4 and 5 on sea birds (draft).

Sea Birds

1.   The IMAP Decision (IG.22/7) recognizes that monitoring all species reported in the Annex II of the SPA/BD Protocol "**List of endangered or threatened species" is neither feasible nor necessary and therefore focuses on representative species from a range of functional groups**, which can showcase the relationship between environmental pressures and their main impacts on the marine environment. The decision criteria for the selection of species have been the following:

- marine species sensu lato, ideally with a wide distribution across the Mediterranean;
- species suitable to regional assessment of GES;
- species of major conservation concern in the Mediterranean; and
- species representing the various functional groups well.

The reference species list was discussed based on these criteria. Based on the discussion, a final list of 11 indicator species has been identified (Table 1)

The table below shows the 11 representative seabird species against which these common indicators will be assessed. These species have been identified as **potentially indicative of the relationship between environmental pressures and their main impacts on the marine environment**. Functional groups aim to combine information on different species in order to illustrate the effect of common factors. Table 1 represents the seabirds species taken into account for Mediterranean basin monitoring trough the present Data Standards. The exhaustive list of species above mentioned will found in the Annex II of the SPA/BD Protocol.

2.

Table 1: Representative seabird species

FUNCTIONAL GROUP	SPECIES	
	Scientific name	**Common name**
Coastal top predators	*Pandion haliaetus*	Osprey
Inshore benthic feeders	*Phalacrocorax aristotelis ssp. desmarestii*	(Mediterranean) Shag
Offshore surface-feeders	*Larus audouinii*	Audouin's gull

Inshore surface feeders	*Larus genei* *Thalasseus (= Sterna) bengalensis* *Thalasseus (= Sterna) sandvicensis*	Slender-billed Gull Lesser Crested Tern Sandwich Tern
Offshore (surface or pelagic) feeders	*Hydrobates pelagicus* *Calonectris diomedea* *Puffinus yelkouan* *Puffinus mauretanicus*	Mediterranean Storm-petrel Scopoli's Shearwater Yelkouan Shearwater Balearic Shearwater

3.   The representative species of each functional group should be monitored on a regular basis, if present in the country. Functional groups aim to combine information on different species in order to illustrate the effect of common factors. The rationale for this classification is that natural and anthropogenic factors are likely expected to act similarly on species that share the same food types and display similar feeding behaviors and are subject to the same constraints on food availability.

4.   Precisely to take into account the different behaviors of the species belonging to the different functional groups, 3 modules have been developed for C.I.s 4 & 5. Specifically, **Module BB1** refers to the Mediterranean Shag Survey (*Phalacrocorax aristotelis desmarestii*), **Module BB2** has been structured for Gulls and Terns Survey (*Ichthyaetus audouinii; Thalasseus sandvicensis; Thalasseus bengalensis; Larus genei*) and **Module BB3** for Shearwaters Survey (*Calonectris diomedea; Puffinus yelkouan; Puffinus mauretanicus*). As for the *Hydrobates pelagicus*, since this species is characterized by small birds that nest in caves, the monitoring is particularly impactful, therefore only the distribution is monitored. A specific module for C.I.s 4&5 needs to be developed for *Pandion haliaetus*.

5.   The nature of the data to be collected varies with the specific Common Indicator as illustrated in the DDs at the end of this document. A monitoring strategy should consider possible data in the form of numerical values of distribution (total area occupied, maps), abundance (number of birds present, number of apparently occupied nests, etc.), breeding productivity (number of nests, number of nests with dead chick(s)) and general demography (annual survival rate, sex ratio, age class ratio).

6.   The Data Standards for the collection of monitoring data have been developed with reference to the method that allows to obtain more effectively numerical information on their abundance (Common Indicator 4), and therefore on the trend of their population over time.

7.   Seabirds breeding distribution (Module BB4 - C.I.s 3) refers to all the species present in Table 1.

Module BB1 (Mediterranean Shag Survey) - Module BB2 (Gulls and Terns Survey) - Module BB3 (Shearwaters Survey) (C.I.s 4&5)

1.   Abundance (C.I.4) is a parameter of population demographics, and is critical for determining the growth or decline of a population.

2.   The objective of this indicator is to determine the population status of selected species by medium- long term monitoring to obtain population trends for these species. This objective requires a census to be conducted in breeding, migratory, wintering, developmental and feeding areas.

3.   Demographics (C.I.5) may include any statistical factors with a potential to influence population growth or decline, with several parameters being particularly important: population size, age, fecundity (birth rates), mortality (death rates), and sex ratios. When applied in population viability models, demographic parameters allow estimating the extinction risk of any given population.

4.   **Module BB1 (Mediterranean Shag Survey)** and **Module BB2 (Gulls and Terns Survey)** allow to report the indication of population abundance by referring to different methods.

5.　　For the **Module BB3 (Shearwaters Survey)**, three sections have been developed to report data on abundance (C.I.4), each one related to a specific sampling method**: Acoustic Survey, Rafts/Flocks Counts, Nest Density Survey** (Table 7-9)**.** The data on Demographics characteristics (C.I.5) are required in **Breeding Success** section (Table 10).

Module BB4 - Distribution - (C.I. 3)

1.　　The objective of C.I. 3 (Species distributional range) is to determine the species range of the seabirds that are present in Mediterranean waters; especially the priorities species shown in Table 1.

2.　　Change of breeding/wintering distribution of population reflects the habitat changes, availability of food resources, and pressures related to human activity and climate change. This indicator could be based on a set of single species indicators that reflects distribution pattern of breeding/wintering populations of the selected species.

3.　　The presence of the selected species should be monitored all along the Mediterranean coast and in the known breeding colonies or wintering or feeding areas.

4.　　The distribution map showing the occurrence (presence/absence) of breeding colonies must be plotted on the selected ETRS grid, with suggestion in using the scale of "National part of subdivision" as the basis working scale, by using a grid of 10x10 km square cells in the multipurpose Pan-European mapping standard (ETRS89 Lambert Azimuthal Equal-Area 52-10 projection coordinate reference system). For the reporting of small contracting parties such as Malta or Cyprus, maps of 5x5 km or 1x1 km grids could be preferred because these will then be aggregated to 10x10 km for visualization at the Regional or subregional level.

Table 1: DSs & DDs **Module BB1** (Mediterranean Shag Survey**) Site** for IMAP C. I.s 4&5 - **Sea Birds**

Field	Description	List of value
CountryCode	Member country code as ISO two digits, for example "IT" for Italy.	
SiteID	Survey Site Code.	
SiteName	Survey Site Name. (Survey site could be for example a main island).	
Region	Adminstrative subdivision of first level which the station belongs to (according to the country subdivision)	
MPAName	Name of the national Marine Protected Area including the survey site.	
Natura2000Name	Name of the Natura 2000 protected area including the survey site.	
SPAName	Name of the Specially Protected Areas (SPAs) or Specially Protected Areas of Mediterranean Importance (SPAMIs) near the survey site.	
Latitude	Latitude of the centroid of the survey site in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx).	
Longitude	Longitude of the centroid of the survey site in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx). Use positive values without '+' before numbers (for ex. 13.98078) for coordinates east of the of the Greenwich Meridian (0°) and negative values with '-' for coordinates west of the Greenwich Meridian (0°) (for ex. -2.6893).	
Remarks	Notes	

Table 2: DSs & DDs **Module BB1** (Mediterranean Shag Survey) **Mediterranean Shag** for IMAP C. I.s 4&5 - **Sea Birds**

Field	Description	List of value
CountryCode	Member country code as ISO two digits, for example "IT" for Italy.	
SiteID	Survey Site Code.	
Year_start	Sampling start year in YYYY format	
Month_start	Sampling start month in 1-12 format	
Day_start	Sampling start day in 1-31 format	
Time_start	Hour-minutes-seconds of sampling start in HH:MM:SS format	
Year_end	Sampling end year in YYYY format	
Month_end	Sampling end month in 1-12 format	
Day_end	Sampling end day in 1-31 format	
Time_end	Hour-minutes-seconds of sampling end in HH:MM:SS format	
StationName	Name of the specific station inside the survey site	
SpeciesID	Monitored species code. Enter one of the values from the list	137178 = *Phalacrocorax aristotelis ssp. desmarestii*
SpeciesName	Monitored species. Enter one of the values from the list	*Phalacrocorax aristotelis ssp. desmarestii*
AON	Apparently Occupied Nest (AON)	
AdultsTOT	Total Number of adults (including the incubating ones)	
ColonySize	Total number of pairs	
Method	Method of assessment for count the number of pairs ("ColonySize" field). Enter one of the values from the list	AON = Apparently Occupied Nest AT = Adults TOT multiplied 0.5
NonAds	Number of non adults birds (fledged juveniles and immature birds)	
Remarks	Notes	

Table 3: DSs & DDs **Module BB2** (Gulls and Terns Survey) **Site** for IMAP C. I.s 4&5 - **Sea Birds**

Field	Description	List of value
CountryCode	Member country code as ISO two digits, for example "IT" for Italy.	
SiteID	Survey Site Code.	
SiteName	Survey Site Name. (Survey site could be for example a main island).	
Region	Adminstrative subdivision of first level which the station belongs to (according to the country subdivision)	
MPAName	Name of the national Marine Protected Area including the the survey site.	
Natura2000Name	Name of the Natura 2000 protected area including the survey site.	
SPAName	Name of the Specially Protected Areas (SPAs) or Specially Protected Areas of Mediterranean Importance (SPAMIs) near the survey site.	

Latitude	Latitude of the centroid of the survey site in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx).	
Longitude	Longitude of the centroid of the survey site in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx). Use positive values without '+' before numbers (for ex. 13.98078) for coordinates east of the of the Greenwich Meridian (0°) and negative values with '-' for coordinates west of the Greenwich Meridian (0°) (for ex. -2.6893).	
Remarks	Notes	

Table 4: DSs & DDs **Module BB2** (Gulls and Terns Survey) **Gulls and Terns** for IMAP C. I.s 4&5 - **Sea Birds**

Field	Description	List of value
CountryCode	Member country code as ISO two digits, for example "IT" for Italy.	
SiteID	Survey Site Code.	
Year_start	Sampling start year in YYYY format	
Month_start	Sampling start month in 1-12 format	
Day_start	Sampling start day in 1-31 format	
Time_start	Hour-minutes-seconds of sampling start in HH:MM:SS format	
Year_end	Sampling end year in YYYY format	
Month_end	Sampling end month in 1-12 format	
Day_end	Sampling end day in 1-31 format	
Time_end	Hour-minutes-seconds of sampling end in HH:MM:SS format	
StationName	Name of the specific station inside the survey site	
SpeciesID	Monitored species code. Enter one of the values from the list	137139 = *Ichthyaetus (Larus) audouinii* 137143 = *Larus genei* 137158 = *Thalasseus bengalensis* 137166 = *Thalasseus sandvicensis*
SpeciesName	Monitored species. Enter one of the values from the list	*Ichthyaetus (Larus) audouinii* *Larus genei* *Thalasseus bengalensis* *Thalasseus sandvicensis*
AOT	Apparently Occupied Territories (AOT)	
AdultsTOT	Total number of adults (including the incubating ones)	
Chicks	Number of chicks	
Juvs	Number of fledged	
NestsNumber	Number of nests	
ColonySize	Number of pairs estimated if nest number not available	
Method	Method of assessment of pairs number	1 = Nest Count 2 = Adults TOT multiplied 0.7 3 = Apparently Occupied Territories (AOT)
Remarks	Notes	

Table 6: DSs & DDs **Module BB3** (Shearwaters Survey) **Site** for IMAP C. I.s 4&5 - **Sea Birds**

Field	Description	List of value
CountryCode	Member country code as ISO two digits, for example "IT" for Italy.	
SiteID	Survey Site Code.	
SiteName	Survey Site Name. (Survey site could be for example a main island).	
Region	Adminstrative subdivision of first level which the station belongs to (according to the country subdivision)	
MPAName	Name of the national Marine Protected Area including the the survey site.	
Natura2000Name	Name of the Natura 2000 protected area including the survey site.	
SPAName	Name of the Specially Protected Areas (SPAs) or Specially Protected Areas of Mediterranean Importance (SPAMIs) near the survey site.	
Latitude	Latitude of the centroid of the survey site in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx).	
Longitude	Longitude of the centroid of the survey site in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx). Use positive values without '+' before numbers (for ex. 13.98078) for coordinates east of the of the Greenwich Meridian (0°) and negative values with '-' for coordinates west of the Greenwich Meridian (0°) (for ex. -2.6893).	
Remarks	Notes	

Table 7: DSs & DDs **Module BB3** (Shearwaters Survey) **Acoustic Survey** for IMAP C. I.s 4&5 - **Sea Birds**

Field	Description	List of value
CountryCode	Member country code as ISO two digits, for example "IT" for Italy.	
SiteID	Survey Site Code.	
Year_start	Sampling start year in YYYY format	
Month_start	Sampling start month in 1-12 format	
Day_start	Sampling start day in 1-31format	
Time_start	Hour-minutes-seconds of sampling start in HH:MM:SS format	
Year_end	Sampling end year in YYYY format	
Month_end	Sampling end month in 1-12 format	
Day_end	Sampling end day in 1-31 format	
Time_end	Hour-minutes-seconds of sampling end in HH:MM:SS format	
StationName	Name of the specific station inside the survey site	
SpeciesID	Monitored species code. Enter one of the values from the list	137194 = *Calonectris Diomedea* 137204 = *Puffinus yelkouan* 445503 = *Puffinus mauretanicus*
SpeciesName	Monitored species. Enter one of the values from the list	*Calonectris Diomedea* *Puffinus yelkouan* *Puffinus mauretanicus*

Rats	Presence of rats. Enter one of the values from the list	Y = Presence N = Absence
Num_males	Number of males	
Num_females	Number of females	
Num_undefined	Number of unsexed individuals	
Remarks	Notes	

Table 8: DSs & DDs Module **BB3** (Shearwaters Survey) **Rafts/Flocks Counts** for IMAP C. I.s 4&5 - **Sea Birds**

Field	Description	List of value
CountryCode	Member country code as ISO two digits, for example "IT" for Italy.	
SiteID	Survey Site Code.	
Year_start	Sampling start year in YYYY format	
Month_start	Sampling start month in 1-12 format	
Day_start	Sampling start day in 1-12 format	
Time_start	Hour-minutes-seconds of sampling start in HH:MM:SS format	
Year_end	Sampling end year in YYYY format	
Month_end	Sampling end month in 1-12 format	
Day_end	Sampling end day in 1-12 format	
Time_end	Hour-minutes-seconds of sampling end in HH:MM:SS format	
StationName	Name of the specific station inside the survey site	
SpeciesID	Monitored species code. Enter one value of the column 'SpeciesID' of the list 'List_species'	137194 = *Calonectris Diomedea* 137204 = *Puffinus yelkouan* 445503 = *Puffinus mauretanicus*
SpeciesName	Monitored species. Enter one value of the column 'SpeciesName' of the list 'List_species'	*Calonectris Diomedea* *Puffinus yelkouan* *Puffinus mauretanicus*
Raft_Flock	Groups of birds rafting or flocks returning to the breeding site. Enter one of the values from the list	R = Rafts F = Flocks
NumberIndividuals	Number of individuals (total number of rafting individuals or total number of passing flocks)	
Remarks	Notes	

Table 9: DSs & DDs **Module BB3** (Shearwaters Survey) **Nest Density Survey** for IMAP C. I.s 4&5 - **Sea Birds**

Field	Description	List of value
CountryCode	Member country code as ISO two digits, for example "IT" for Italy.	
SiteID	Survey Site Code.	
Year_start	Sampling start year in YYYY format	
Month_start	Sampling start month in 1-12 format	
Day_start	Sampling start day in 1-12 format	
Time_start	Hour-minutes-seconds of sampling start in HH:MM:SS format	
Year_end	Sampling end year in YYYY format	

Month_end	Sampling end month in 1-12 format	
Day_end	Sampling end day in 1-12 format	
Time_end	Hour-minutes-seconds of sampling end in HH:MM:SS format	
StationName	Name of the specific station inside the survey site	
SpeciesID	Monitored species code. Enter one value of the column 'SpeciesID' of the list 'List_species'	137194 = *Calonectris Diomedea* 137204 = *Puffinus yelkouan* 445503 = *Puffinus mauretanicus*
SpeciesName	Monitored species. Enter one value of the column 'SpeciesName' of the list 'List_species'	*Calonectris Diomedea* *Puffinus yelkouan* *Puffinus mauretanicus*
Rats	Presence of rats. Enter one of the values from the list	Y = Presence N = Absence
Habitat	Prevailing habitat	
TotalAOB	Total apparently occupied burrows (sum)	
TotalNIB	Total number of burrows that cannot be inspected (sum)	
TotalSEB	Total suitable empty burrows (sum)	
ExtensionArea	Total monitored area in square kilometers	
Remarks	Notes	

Table 10: DSs & DDs Module **BB3** (Shearwaters Survey) - **Breeding success** for IMAP C. I.s 4&5 - **Sea Birds**

Field	Description	List of value
CountryCode	Member country code as ISO two digits, for example "IT" for Italy.	
SiteID	Survey Site Code.	
Year_start	Sampling start year in YYYY format	
Month_start	Sampling start month in 1-12 format	
Day_start	Sampling start day in 1-31 format	
Time_start	Hour-minutes-seconds of sampling start in HH:MM:SS format	
Year_end	Sampling end year in YYYY format	
Month_end	Sampling end month in 1-12 format	
Day_end	Sampling start day in 1-31 format	
Time_end	Hour-minutes-seconds of sampling start in HH:MM:SS format	
StationName	Name of the specific station inside the survey site	
SpeciesID	Monitored species code. Enter one value of the column 'SpeciesID' of the list 'List_species'	137194 = *Calonectris Diomedea* 137204 = *Puffinus yelkouan* 445503 = *Puffinus mauretanicus*
SpeciesName	Monitored species. Enter one value of the column 'SpeciesName' of the list 'List_species'	*Calonectris Diomedea* *Puffinus yelkouan* *Puffinus mauretanicus*
MonitoredCavity	Number of monitored cavities	
OccupiedCavity	Number of occupied nests with the presence of an incubating adult or eggs	
MinHatchedEggs	MinHatchedEggs	

NumberFledged	Number of fledged juveniles	
Remarks	Notes	

Table 51: DSs & DDs **Module BB4** (Seabirds Breeding Distribution) **Site** for IMAP C. I. 3 - **Sea Birds**

Field	Description	List of value
CountryCode	Member country code as ISO two digits, for example "IT" for Italy.	
SiteID	Survey Site Code.	
SiteName	Survey Site Name. (Survey site could be for example a main island).	
Region	Adminstrative subdivision of first level which the station belongs to (according to the country subdivision)	
MPAName	Name of the national Marine Protected Area including the survey site.	
Natura2000Name	Name of the Natura 2000 protected area including the survey site.	
SPAName	Name of the Specially Protected Areas (SPAs) or Specially Protected Areas of Mediterranean Importance (SPAMIs) near the survey site.	
Latitude	Latitude of the centroid of the survey site in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx).	
Longitude	Longitude of the centroid of the survey site in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx). Use positive values without '+' before numbers (for ex. 13.98078) for coordinates east of the of the Greenwich Meridian (0°) and negative values with '-' for coordinates west of the Greenwich Meridian (0°) (for ex. -2.6893).	
Remarks	Notes	

Table 6: DSs & DDs **Module BB4** (Seabirds Breeding Distribution) **Distribution** for IMAP C. I. 3 - **Sea Birds**

Field	Description	List of value
CountryCode	Member country code as ISO two digits, for example "IT" for Italy.	
SiteID	Survey Site Code.	
Year	Sampling year in YYYY format	
SpeciesID	Monitored species code. Enter one value of the column 'SpeciesID' of the list 'List_species'	
SpeciesName	Monitored species. Enter one value of the column 'SpeciesName' of the list 'List_species'	
GISfile	Naming the GIS file that contains distribution map showing the occurrence (presence/absence) of breeding colonies must be plotted on the selected ETRS grid. In the attribute table of the GIS file, for each breeding colony, the NationalStationID field must be reported. The file must be returned in a georeferenced shapefile format (WGS84) and compressed in a single .zip file that includes .zip, .prj, .dbf, etc ... files. The filename must conform to the following Rule of composition: "Seabirds_GISfile_ <AreaName> _ <gg_mm_aaaa> .zip", eg. Seabirds_GISfile_Portofino_12_05_2016.zip. If Region	

	and/or AreaName contains spaces, replace these spaces with "_".	
ExtensionArea	Total area occupied in square kilometers	
Remarks	Notes	

Table 7: **Species List** for IMAP C.I.s 3,4 & 5- **Sea Birds**

SpeciesID	SpeciesName	Module to be used to report data
159377	*Pandion haliaetus*	**Module BB4** (Seabirds Breeding Distribution)
137178	*Phalacrocorax aristotelis ssp. desmarestii*	**Module BB1** (Mediterranean Shag Survey) **Module BB4** (Seabirds Breeding Distribution)
137139	*Ichthyaetus (Larus) audouinii*	**Module BB2** (Gulls and Terns Survey) **Module BB4** (Seabirds Breeding Distribution)
137143	*Larus genei*	**Module BB2** (Gulls and Terns Survey) **Module BB4** (Seabirds Breeding Distribution)
137158	*Thalasseus bengalensis*	**Module BB2** (Gulls and Terns Survey) **Module BB4** (Seabirds Breeding Distribution)
137166	*Thalasseus sandvicensis*	**Module BB2** (Gulls and Terns Survey) **Module BB4** (Seabirds Breeding Distribution)
137189	*Hydrobates pelagicus*	**Module BB4** (Seabirds Breeding Distribution)
137194	*Calonectris diomedea*	Module **BB3** (Shearwaters Survey) **Module BB4** (Seabirds Breeding Distribution)
137204	*Puffinus yelkouan*	Module **BB3** (Shearwaters Survey) **Module BB4** (Seabirds Breeding Distribution)
445503	*Puffinus mauretanicus*	Module **BB3** (Shearwaters Survey) **Module BB4** (Seabirds Breeding Distribution)