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Videoconference, 10-11 June 2021

Agenda item 6: Data Dictionaries and Data Standards for the Common Indicators 3, 4 and 5 related to Marine Mammals, Marine Turtles and Sea 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 and process data according to the proposed Data Standards and Data Dictionaries (DSs and DDs) that set the basic information on data reporting within IMAP.

It should be noted that proposed DSs and DDs also build on the respective relevant experience of INFO/RAC, as well as the experience gained in building other relevant databases such as EMODnet Chemistry platform, SeaDataNet and WISE Data Dictionary maintained by EEA and available in EIONET. In such a way the IMAP Info System is interrelated with other regional marine databases (e.g. SeaDataNet, SeaDataCloud, EMODNET, etc.), essential to avoid duplication of data transmissions for the Contracting Parties.

The ongoing process of evolution from the pilot to the final IMAP Info System will be also supported by the EU funded project EcAp MED III project and will include the whole set of modules for the IMAP Common Indicators (excluding the candidate C.I.s at the moment).

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 provides 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 collecting a wider set of data also 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.

Starting from the middle of 2019, 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 aim of the current document is to present the "draft" DSs & DDs related to **Common Indicators 3,4&5**. By reviewing this document, the present meeting is expected to provide **guidance, inputs and further reflections** on the proposed "draft" DSs &DDs for the selected Common Indicators. On this basis, a continuous process of harmonization with IMAP guidance factsheets and common indicators monitoring protocols will be assured during **phase II**. Consequently, also the structure of the Data Standards and Data Dictionaries could be revised and harmonized based on the final result of the IMAP developing process. Interactive work will be needed to refine these Data Standards and Data Dictionaries gradually.

As stated by the **CORMON Biodiversity and Fisheries (Marseille 12-13 February 2019)** monitoring protocols should guide data standards development that is carried out in parallel with discussions on the agreed common methodologies. Information systems are a major tool to collect and transfer data. 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.

The appointment and the activation of on-line network of Mediterranean designate qualified experts of the Biodiversity OWG, supporting INFO/RAC on finalization of DSs and DDs for the cluster Biodiversity and Fisheries, as requested during the CORMON of Marseille (12-13 February 2019) and Rome (21 May 2019), will usefully ensure this 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 marine reptiles:

- 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 birds 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

Sea Birds

1.   The table below shows the 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: Representative seabird species

FUNCTIONAL	GROUP SPECIES	
Coastal top predators	*Falco eleonorae* *Pandion haliaetus*	Eleonora's Falcon Osprey
Inshore benthic feeders	*Phalacrocorax aristotelis*	(Mediterranean) Shag
Offshore surface-feeders	*Larus audouinii*	
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*	European Storm-petrel Scopoli's Shearwater Yelkouan Shearwater Balearic Shearwater

2.   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 behaviours and subject to the same constraints on food availability.

3.   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 3 & 4. Specifically, each module has been structured for a specific species with the idea that it can also be used for other species belonging to the same functional groups. In each module, for the moment, all the species present in Table 1 have been listed, reserving the indication of the correct location for CPs (**Table 13**).

4.   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).

5.   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: the "Census of colonies" monitoring method.

Modules BB1- BB2- BB3 - Protocol A,B&C (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.   The data collected with the Module BB1 could be used to calculate an index of population abundance. It could be useful for this purpose the standard software used across Europe by the European Bird Census Council (EBCC), the Species Trends Analysis Tool for birds (BirdSTATs).

4.   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.

5.   This module has been developed for *Phalacrocorax aristotelis desmarestii*, belonging to the "Inshore benthic feeders" functional group.

6.   The considerations above also apply to the module **Module BB2 - Protocol B** (C.I.s 4&5) specifically developed for *Ichthyaetus (Larus) audouinii*, belonging to the "Offshore surface-feeders" functional group and to the module **Module BB3 - Protocol C** (C.I.s 4&5) specifically developed for *Puffinus yelkouan*, belonging to the "Offshore (surface or pelagic) feeders" functional group.

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 showed 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 in 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 2: DSs & DDs **Module BB1** (Protocol A) **Station** 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.	
NationalStationID	Station code	
NationalStationName	Station name	
Region	Adminstrative subdivision of first level which the station belongs to (according to the country subdivision)	
AreaName	Survey Area Name	
SiteName	Survey Site Name	
SPAName	Name of the Specially Protected Areas (SPAs) or Specially Protected Areas of Mediterranean Importance (SPAMIs) near the survey site.	
Latitude	Latitude of the station in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx).	
Longitude	Longitude of the station 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 3: DSs & DDs **Module BB1** (Protocol A) **Protocol1** 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.	
NationalStationID	Station 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	

SpeciesID	Monitored species. 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'	
BirdWatcherName	Main bird watchers. Enter the name and surname or code identification of each bird watcher separated by ";"	
IDSession	Session ID code	
Group	Type of sighting. Enter one of the values from the list	C = Colony IN = Isolated nest G = Group of individuals
NumNestHatch	Number of nests with hatching adults	
NumNestChicks	Number of nests with chicks	
NumNestExcr	Number of apparently empty nests but with excrement	
NumNestUC	Number of nests with unknown content	
NumAdults	Number of flying adults outside the colony	
NumJuvs	Number of juveniles out of the colony	
NumAdultsSea	Number of adults grouped in the sea	
Remarks	Notes	

Table 4: DSs & DDs **Module BB2** (Protocol B) **Station** 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.	
NationalStationID	Station code	
NationalStationName	Station name	
Region	Adminstrative subdivision of first level which the station belongs to (according to the country subdivision)	
AreaName	Survey Area Name	
SiteName	Survey Site Name	
SPAName	Name of the Specially Protected Areas (SPAs) or Specially Protected Areas of Mediterranean Importance (SPAMIs) near the survey site.	
Latitude	Latitude of the station in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx).	
Longitude	Longitude of the station 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 5: DSs & DDs **Module BB2** (Protocol B) **Protocol1** 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.	
NationalStationID	Station 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	
SpeciesID	Monitored species. 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'	
BirdWatcherName	Main bird watchers. Enter the name and surname or code identification of each bird watcher separated by ";"	
HatchingAdults	Number of hatching adults and sub-adults	
ColonyAdults	Number of adults and sub-adults in the colony	
OutsideColonyAdults	Number of adults and sub-adults outside the colony	
AdultsTOT	Total number of adults	
MaxAdultsAlarm	Maximum number of adults in alarm (if different from Adults TOT)	
ASCodesRingsRead	Enter the codes of the rings read for adults and sub-adults accompanied by a sense of reading (up, down), separated by ";"	
ChicksVisibleAD	Number of chicks visible from afar	
Juvs	Number of juveniles in the vicinity	
ChicksJuvsTOT	Total number of chicks and juveniles	
PGCodesRingsRead	Enter the codes of the read rings of the chicks visible from afar or of the juveniles	
Remarks	Notes	

Table 6: DSs & DDs **Module BB2** (Protocol B) **Protocol2** 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.	
NationalStationID	Station 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	
SpeciesID	Monitored species. 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'	

BirdWatcherName	Main bird watchers. Enter the name and surname or code identification of each bird watcher separated by ";"	
NumNest_1e	Number of nests with 1 egg (not hatched)	
NumNest_2e	Number of nests with 2 eggs (not hatched)	
NumNest_3e	Number of nests with 3 eggs (not hatched)	
NumNest_4e	Number of nests with 4 eggs (not hatched)	
NumNest_1c	Number of nests with 1 chick (dead)	
NumNest_2c	Number of nests with 2 chicks (dead)	
NumNest_3c	Number of nests with 3 chicks (dead)	
NumNest_1e1c	Number of nests with 1 egg and 1 chick (dead)	
NumNest_1e2c	Number of nests with 1 egg and 2 chicks (dead)	
NumNest_2e1c	Number of nests with 2 eggs and 1 chick (dead)	
NumNest_other	Number of nests with with content to specify	
ContNest_other	Specify the contents of NumNest_other	
TotalNestEgg	Total nests with eggs (sum)	
TotalNestChicks	Total nests with chicks (sum)	
TotalNestEggChicks	Total nests with eggs and chicks (sum)	
TotalNestEmpty	Total empty nests (sum)	
NumScatEgg	Number of scattered eggs	
NumWanderingChicks	Number of chicks found dead away from the nest, if applicable	
NumPreiedNest	Number of preied nests	
AgePC	Age of dead/preied chicks, if applicable	
AdultsCarcasses	Number of adult carcasses	
RingsFound	Number of rings found	
CodeRingsFound	Enter the codes of the rings found	
Remarks	Notes	

Table 7: DSs & DDs **Module BB3** (Protocol C) **Station** 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.	
NationalStationID	Station code	
NationalStationName	Station name	
Region	Adminstrative subdivision of first level which the station belongs to (according to the country subdivision)	
AreaName	Survey Area Name	
SiteName	Survey Site Name	
SPAName	Name of the Specially Protected Areas (SPAs) or Specially Protected Areas of Mediterranean Importance (SPAMIs) near the survey site.	
Latitude	Latitude of the station in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx).	
Longitude	Longitude of the station 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 8: DSs & DDs **Module BB3** (Protocol C) **Protocol1** 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.	
NationalStationID	Station 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	
SpeciesID	Monitored species. 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'	
Rats	Presence of rats. Enter one of the values from the list	Y = Presence N = Absence
BirdWatcherName	Main bird watchers. Enter the name and surname or code identification of each bird watcher separated by ";"	
IDSession	Session ID code	
Num_males	Number of males per session	
Num_females	Number of females per session	
Num_undefined	Number of animals with undefined gender per session	
Remarks	Notes	

Table 9: DSs & DDs Module **BB3** (Protocol C) **Protocol2** 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.	
NationalStationID	Station 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	
SpeciesID	Monitored species. 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'	
NumSession	Number of session	

IDScan	Identification code of the scan	
NumberIndividualsScan	Number of individuals for each scan (total flock sum)	
Remarks	Notes	

Table 10: DSs & DDs **Module BB3** (Protocol C) **Protocol3** 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.	
NationalStationID	Station 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	
SpeciesID	Monitored species. 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'	
Rats	Presence of rats. Enter one of the values from the list	Y = Presence N = Absence
BirdWatcherName	Main bird watchers. Enter the name and surname or code identification of each bird watcher separated by ";"	
Habitat	Prevailing habitat	
LatitudeSector	Latitude of the starting point of the sector in the WGS84 decimal degrees reference system with at least 5 digits (xx.xxxxx).	
LongitudeSector	Latitude of the starting point of the sector 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).	
NumOC_A	Number of occupied cavities with the presence of an adult	
NumOC_J	Number of occupied cavities with the presence of a juvenile	
NumOC_E	Number of occupied cavities with only egg present	
NumeroNIC_TR	Number of non-inspectable cavities with traces present	
NumNIC_NT	Number of non-inspectable cavities without traces present	
NumSEC_TR	Number of suitable empty cavities with traces present	
NumSEC_NO	Number of suitable empty cavities without traces present	
NumSEC_ON	Number of suitable empty cavities with old nest	
NumSEC_PN	Number of suitable empty cavities with preyed nest	
TotalOC	Total cavities occupied (sum)	
TotalNIC	Total number of cavities that cannot be inspected (sum)	
TotalSEC	Total suitable empty cavities (sum)	

Remarks	Notes	

Table 11: DSs & DDs **Module BB4** (Distribution) **Station** 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.	
NationalStationID	Station code	
NationalStationName	Station name	
Region	Adminstrative subdivision of first level which the station belongs to (according to the country subdivision)	
AreaName	Survey Area Name	
SPAName	Name of the Specially Protected Areas (SPAs) or Specially Protected Areas of Mediterranean Importance (SPAMIs) near the survey site.	
Latitude	Latitude of the of the station representing the breeding colonies of the species in the reference system in decimal degrees WGS84 with at least 5 digits (xx.xxxxx).	
Longitude	Longitude of the of the station representing the breeding colonies of the species of the species 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 12: DSs & DDs **Module BB4** (Distribution) **Protocol1** 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.	
NationalStationID	Station code	
Year	Sampling year in YYYY format	
SpeciesID	Monitored species. 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 13: Species List for IMAP C.I.s 3,4 & 5- **Sea Birds**

SpeciesID	SpeciesName
212680	*Falco eleonorae*
159377	*Pandion haliaetus*
137178	*Phalacrocorax aristotelis desmarestii*
137139	*Ichthyaetus (Larus) audouinii*
137143	*Larus genei*
137158	*Thalasseus bengalensis*
137166	*Thalasseus sandvicensis*
137189	*Hydrobates pelagicus*
137194	*Calonectris diomedea*
137204	*Puffinus yelkouan*
445503	*Puffinus mauretanicus*