COUNCIL OF EUROPE

CONSEIL DE L'EUROPE

Strasbourg, 1 September 2017 **T-PVS/PA (2017) 17**
[pa17e_2017.doc]

CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

Group of Experts on Protected Areas and Ecological Networks

8th meeting
27-28 September 2017

EXPLANATORY NOTES AND GUIDELINES FOR THE PERIOD 2013-2018

PART 1: THE REPORT FORMAT FIELD-BY-FIELD GUIDANCE

Document prepared by
the Directorate of Democratic Participation
and Marc Roekaerts (EUREKO)

CONTENTS

INTRODUCTION

Within the framework of the long lasting cooperation between the Council of Europe Bern Convention and the European Union Directorate General for Environment, the streamlining process of the Emerald Network and Natura 2000 in terms of methodology, tools and monitoring is a common objective.

The Council of Europe is engaging a consultation process of the Contracting Parties to the Bern Convention for adopting under Resolution No. 8 (2012) a reporting on the status of conservation of species and habitats of European importance based on the form and tool developed by the European Union for the forthcoming reporting cycle (2013-2018) under the Nature Directives.

To provide appropriate guidance to the Contracting Parties to the Bern Convention in the upcoming reporting cycle, the Secretariat has adapted to the specificities of the Bern Convention the following guidelines elaborated by the European Union for the purposes of the reporting under the Nature Directives. A major adaptation compared to the format adopted by the EU is a merged form for all species and habitats including birds.

These guidelines were compiled by the European Environment Agency (EEA) and its European Topic Centre on Biological Diversity (ETC/BD). They were developed through a collaborative work of EU's Expert Group on Reporting under the Nature Directives, its ad-hoc groups, and EU's Expert Group on the Birds and the Habitats Directives (NADEG).

Box 1: How to use these explanatory notes & guidelines

These guidelines are aimed primarily at those responsible for compiling the national reports for the period 2013–2018, but may also be of interest to others who wish to use or to better understand the results.

The guidelines are organised in three parts: a short introduction, a practical step-by-step guidance on how to fill in the different fields of the reports, and a part describing the concepts and methods used in more detail.

The technical specifications for the data to be reported will be given in specific delivery manuals; code lists with codes for standardised entry of information in the Report formats will be available on the Emerald Network Reference Portal. The delivery manuals and code lists complement these Explanatory Notes & Guidelines.

Technical documents and reference lists

The Reference Portal[1] contains documents and other material related to the information provided in the Report formats as defined under paragraphs 4.1-4.3 of Resolution No. 8 (2012).

It includes:

- the Report format for the period 2013–2018;
- these Explanatory Notes & Guidelines;
- reference material, e.g. checklists for species and habitat types, maps of biogeographical regions, marine area, agreed population units, list of pressures and threats, list of conservation measures, and the European grids (10 x 10 km ETRS) used for mapping the distribution and range;
- additional examples illustrating the guidance provided in these Explanatory Notes & Guidelines;
- IT applications (reporting and range tools) for preparing and delivering the reporting dataset.

Content of the report

The report under paragraph 4 of Resolution No. 8 (2012) provides information on the conservation status of habitats listed in the Resolution No. 4 (1996) and species listed in the Resolution No. 6 (1998). **Conservation status is the overall assessment of the status of a habitat type or a species at the scale of a country biogeographical or marine region or at country scale for bird species**.

Favourable conservation status (FCS)

The assessment of the conservation status of a habitat type or species is related to the concept of Favourable conservation status (FCS). Favourable conservation status is the overall objective to be reached for all habitat types and species (i.e. the habitats and species listed in Resolution No. 4 (1996) and No. 6 (1998)). It can be simply described as **a situation where a habitat type or species is prospering (in both quality and extent/population) and with good prospects to continue to do so in the future**. The conservation status objective of the Bern Convention is defined in positive terms,

[1] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

oriented towards a favourable situation, which needs to be defined, reached and maintained. It is therefore aimed at achieving far more than trying to avoid extinctions.

The conservation status of a *species* will be taken as "favourable" when:

- *population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats; and*
- *the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and*
- *there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.*

The conservation status of a *habitat* will be taken as "favourable" when:

- *its natural range and areas it covers within that range are stable or increasing; and*
- *the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and*
- *the conservation status of its typical species is favourable as defined above;*

The agreed method for the evaluation of conservation status assesses separately each of the parameters of conservation status (Table 1), with the aid of an evaluation matrix (see Annexes C and E of the Report format), and then combines these assessments to give an overall assessment of conservation status.

Table 1: Parameters for the conservation status assessment of species and habitat types

Parameters for the conservation status assessment of species	**Parameters for the conservation status assessment of habitat types**
Range	Range
Population	Area
Habitat for the species	Structure and functions
Future prospects	Future prospects

Box 2: How is the information on conservation status used?

Regular reporting using an agreed format is an obligation under paragraphs 4.1 – 4.3 of the Resolution No. 8 (2012). It is essential that the reports from the countries are harmonised, otherwise it is not possible to aggregate reports to produce a composite report for the Contracting Parties to the Bern Convention implementing the Emerald Network of Areas of Special Conservation Interest.

PART 1. THE REPORT FORMAT FIELD-BY-FIELD GUIDANCE

Part 1 of these guidelines provides a practical step-by-step guidance on how to fill in the different fields of the Report format. It gives a detailed description of the nature of information to be reported in each field (e.g. a number, a period) and the basic requirements to be met by the information (e.g. "short-term trends should ideally be reported over the last 12 years, but some flexibility is permitted").

More detailed descriptions of concepts and methods for reported information are provided in Part 2 (Definitions and methods).

GENERAL INTRODUCTION AND STRUCTURE OF THE REPORT FORMAT

The Resolution No. 8 (2012) Report format consists of six distinct Annexes (A–F)

Annex A – General report: gives an overview of the implementation and general measures taken.

Annex B – Report format on the main results of the surveillance under paragraph 4.1 of Resolution No. 8 (2012) for Resolution No. 6 (1998) species (Except Bird Species which are handled under Annex F): gives background information for assessment of the conservation status of a species.

Annex C – Assessing conservation status of a species (Species evaluation matrix): the evaluation matrix used to assess the conservation status of a species using the information in the Annex B reports. The assessment conclusions for each species are also reported in the respective Annex B report.

Annex D – Report format on the main results of the surveillance under paragraph 4.1 of Resolution No. 8 (2012) for Resolution No. 4 (1996) habitat types (Habitat type reports): gives background information for assessment of the conservation status of a habitat.

Annex E – Assessing conservation status of a habitat type (Habitat type evaluation matrix): the evaluation matrix used to assess the conservation status of a habitat type using the information in the Annex D reports. The assessment conclusions (i.e. for each parameter and the overall assessment) for each habitat type are also reported in the respective Annex D report.

Annex F – Species reports: Bird species' status and trends Report format.

The information reported in Annexes B and D includes data used for the assessments of conservation status for each biogeographical or marine region at the country and European levels. Therefore, the habitat and species reports have a short "national" section to be completed for each habitat type or species of European interest present in the country, followed by a "biogeographical or marine region" section. This should be completed for each biogeographical or marine region in the country where the habitat or species is present according to the checklists available from Reference Portal.

The information reported in Annex F for Bird species includes data used to undertake the assessment of population status at Pan-European level together with the information needed to evaluate the main drivers and impact of the Emerald Network on the bird species populations (at country level).

ANNEX A - GENERAL REPORT FORMAT

Field-by-field guidance

The general report or "Annex A" uses a very brief structured format aimed at summarising the most important facts and figures on the general implementation of the Recommendation No. 16 (1986) and Resolution No. 5 (1998) on the Emerald Network of Areas of Special Conservation Interest (ASCIs), including links to more detailed information sources. It is mainly targeted at the interested public, but also at informing the Bern Convention Secretariat.

Each country is expected to submit one general report covering its entire European territory. It includes obligatory information about several provisions of the Bern Convention. In addition, the main achievements under the implementation of the Recommendation No. 16 (1986) and Resolution No. 5 (1998), and the main measures taken to ensure the coherence of the Emerald Network should be briefly described. The report should give information of relevance for the period 2013–2018.

Language – the report will be given using English. However, the Report format tries to minimise the difficulties of using the English language by requesting numerical information wherever possible.

All Internet addresses in the reporting fields should be given in full, including the initial "http://" or "https://", if applicable.

0 Country

Select the two-digit code for your country from ISO 3166, in accordance with the list to be found on the Reference Portal[2].

1 Main achievements under Recommendation No. 16 (1986) and Resolution No. 5 (1998)

This section aims to inform the interested public about the main achievements under Recommendation No. 16 (1986) and Resolution No. 5 (1998) and the Emerald Network in the respective country during the reporting period. The information should be given in English.

Describe briefly the main achievements during the reporting period, with a special emphasis on the Emerald Network. This can include, for example:

- demonstrated benefits for different habitats and species;
- experiences with new or improved management techniques;
- positive changes in public acceptance of biodiversity protection;
- improved cooperation between authorities, nature conservationists and other interest groups;
- initiatives to combine establishment of Emerald sites and the local economy.

[2] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

The text should be kept to a maximum of two pages. If a country wishes to add further documentation to that requested, it should note these annexes and their filenames at the end of this field, and upload the relevant files to the EEA's Central Data Repository together with the rest of the report.

2 General information sources on the implementation of the Recommendation No. 16 (1986) and Resolution No. 5 (1998) – links to information sources of the country

This section aims to inform the interested public where they can find information relating to the Emerald Network of the country. In general, only links to Internet addresses are required. However, free text can also be used where there is a need to explain how to access the information source, e.g. in the case of multiple sources of information. All of the following fields should be completed.

2.1 General information on the Recommendation No. 16 (1986) and Resolution No. 5 (1998)

Provide links to general information on the implementation of Recommendation No. 16 (1986) and Resolution No. 5 (1998).

2.2 Information on the Emerald Network in the country

Provide links to general information on the Emerald Network (e.g. an online database of Emerald sites, publications presenting the network).

2.3 Monitoring schemes (Resolution No. 8 (2012) paragraph 3)

Provide links to general information on monitoring (e.g. portal presenting national monitoring scheme(s), monitoring guidelines).

2.4 Protection of Emerald Candidate sites (Recommendation No. 157 (2011))

Provide links to general information on the necessary protection and conservation measures taken, in order to maintain the ecological characteristics of Emerald Candidate sites as provided in Recommendation No. 157 (2011).

2.5 Impact of measures on the conservation status of Resolution No. 4 (1996) habitats and Resolution No. 6 (1998) species

Provide links to general information on the implementation of conservation measures within the Emerald sites and their impact on the conservation status.

2.6 Process of national designation or other measures for Adopted Emerald sites (Resolution No. 8 (2012), paragraph 1)

Provide links to general information on national designation of Emerald sites

2.7 Funding

Provide information on how the implementation of the Emerald Network is funded (International & National agencies, opportunities, etc ..).

2.8 Involvement of Local Authorities, local NGOs, owners related to Emerald sites

Provide information on the involvement of local authorities, local NGOs and owners or owners associations related to the Emerald Network and sites.

2.9 Awareness-raising activities on the Emerald Network

Provide information on awareness raising activities (organisations, publications, newsletters etc …)

2.10 Process of scientific identification of areas suitable for the Emerald Network

Provide information on the methodology used to ensure scientifically based identification of Emerald sites, with reference to Responsible Authorities, Dedicated Inventories undertaken, Database(s) established, involvement of stakeholders, National workshops etc …

2.11 Process of submitting the proposed Emerald sites and their nomination as candidate Emerald sites

Provide information on the process of submitting proposed Emerald sites and their nomination as candidate Emerald sites with reference to difficulties encountered, process timing, reasons for possible delays etc …

3 Emerald Network – site designation

Countries should provide information at national level on the number and surface area of proposed Emerald sites, Emerald sites nominated as Candidate sites, Adopted Emerald sites at the end of the reporting period.

3.1 Number and Area Statistics

Provide the total number and surface area for each of the categories of Emerald sites.
Equally provide the terrestrial and marine surface area

Marine sites are any sites which include any area of sea (seaward side of the coastline).

Marine area of sites is the area on the seaward side of the coastline. The definition of the coastline used to define the marine boundary should follow international[3] or national legislation. This approach is the same as that adopted for the Standard Data Forms (SDFs) for individual Emerald sites. Thus, a site located on the coast and stretching out into the sea should be counted as a "marine site", although it might include a terrestrial component as well as a marine component (to be included in the figure to be reported in the appropriate column, see map in Figure 1).

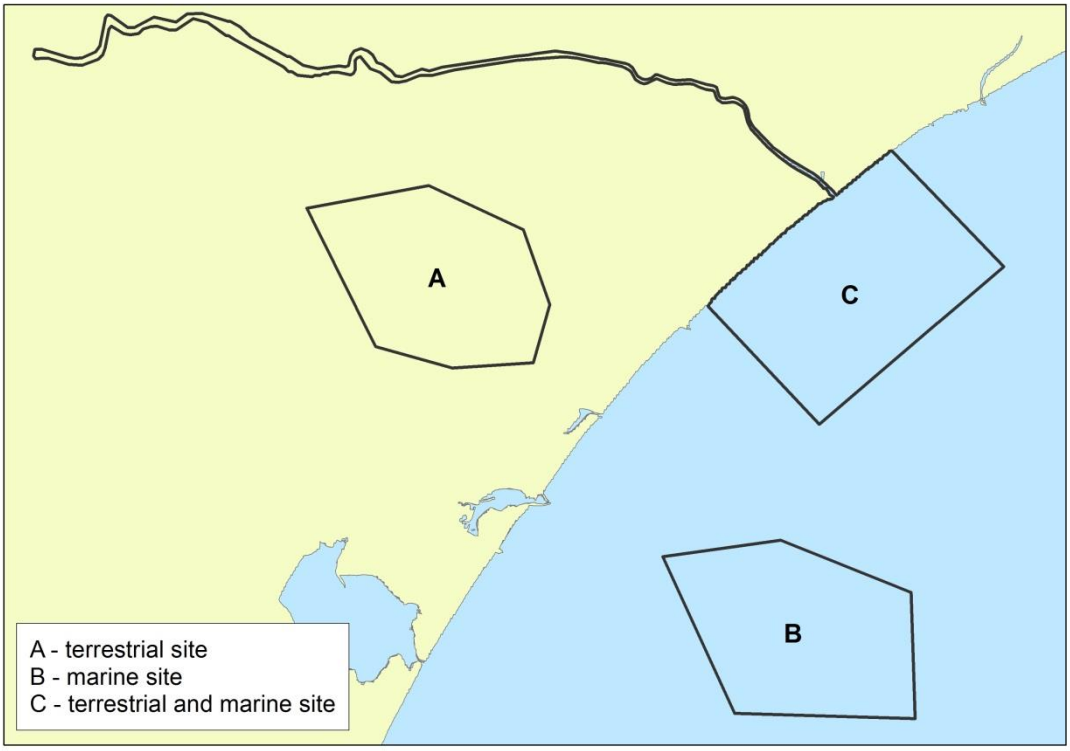
Terrestrial area of sites is any area of a site which is not marine (as defined above). In the Report format the terrestrial area of sites in km^2 plus the area of marine sites in km^2 together should give the total area of all sites.

3.2 Date of the database used

This is normally the date of the last database delivered to the Secretariat of the Bern Convention (uploaded to the EEA Central Data Repository) during the reporting period (2013–2018). Normally, the total number and total area of Emerald sites correspond to the number and the area provided in this database. However, it is understood that occasionally later sources are used to fill in information under this section, for example when sites were designated after the database submission. In this case, please supply this information in the DD/MM/YYYY format.

[3] UN Convention on the Law of the Sea (UNCLOS).

Figure 1: Examples of terrestrial and marine Emerald sites. "A" is a terrestrial site (the site is located in the terrestrial domain only). "B" is a marine site and is located in the marine domain only. "C" is located in a coastal area, and should be counted as a marine site: it consists of both terrestrial (yellow) and marine (blue) areas, to be reported in the appropriate separate columns.



4 Comprehensive management measures put in place for adopted Emerald sites [Resolution No. 8 (2012), paragraph 2, with special reference to paragraphs 2.1, 2.2, 2.3 and 2.4])

"Conservation measures and management plans" are considered to be operational instruments that outline practical measures to achieve the conservation objectives for the sites in the network.

Conservation measures within the network can fall under, but are not limited to, LIFE programmes, Rural Development Plans, Structural Funds or other domestic programmes. Ensure that all relevant management plans or instruments have been fully accounted for.

4.1 Necessary conservation measures have been established according to Resolution No. 8 (2012) paragraph 2 and are implemented

Give the number of sites and the proportion of the network area within the country for which necessary conservation measures have been established (i.e. for which a statutory, administrative or contractual framework exists) and for which the measures are being implemented).

Only sites where all the necessary measures have been identified and are implemented should be included. Do not include sites where conservation measures do not target all of the habitats and species (e.g. with measures targeting only forest habitats and species, although measures are also

needed for other habitats and species) or where not all of the necessary measures have been implemented.

4.2 Conservation measures have been set out in a comprehensive management plan or a similar instrument

Give the number of sites and the proportion of the network area within the country for which a comprehensive management plan or a similar instrument is in place. Although the Standard Data Form (SDF) for each individual site includes information on management plans (i.e. "Yes/no/in preparation"), it is also useful to have information about the overall number of comprehensive management plans or similar instruments. To put this number in context, the proportion of the network area that is covered by such plans is also requested.

For this purpose, only management plans covering all parts of an Emerald site (or sites) and all habitats and species for which the site(s) is/are designated (i.e. comprehensive management plans) should be taken into account. Such plans should fulfil the following minimum requirements:

- indicate all the habitat types and/or species and their localities for which conservation measures are necessary and planned;
- identify the actual status of the habitat types and species and the desired status which should be reached through the conservation measures;
- define clear and achievable conservation objectives;
- identify the necessary measures together with the means and a time schedule which can contribute to meeting those objectives.

5 Measures taken in relation to approval of plans & projects

This section concerns projects and plans for which compensatory measures were decided on during the reporting period. Any sites affected in this way should be reported under this section. Repeat fields as necessary for each combination of site and project/plan.

5.1 Site code

Provide the site code of a site with project(s) or plan(s) in need of compensatory measures.

5.2 Site name

Provide the site name.

5.3 Title of project/plan

Provide the title of the project/plan.

5.4 Year the Bern Convention Secretariat was informed of compensatory measures

Provide the year when the Bern Convention Secretariat was informed about compensatory measures.

5.5 Year project/plan was started

Provide the year when the implementation of the project/plan started.

5.6 Opinion of the Bern Convention Secretariat?

Indicate whether an opinion from the Secretariat was requested ("Yes/No").

5.7 Impact of projects requiring compensatory measures on the conservation status (optional)

Describe the impact of such projects/plans on the conservation status of habitat types and species.

6 Measures taken to ensure coherence of the Emerald Network

This section is for a general description of the main measures taken to ensure the coherence of the Emerald Network. Give an overview at national level of actions taken (including legal measures, or systematic studies); do not give detailed site-by-site descriptions. If relevant, give references to published reports, scientific papers or websites.

The following section 7 is only dealing with Bird Species:

7 Research and work required as a basis for the protection, management and sustainable use of bird populations

This section relates to information required to take appropriate measures for the coordination of research and any work required as a basis for the protection, management and use of native bird populations. The information requested is limited to:

7.1 National bird atlas

Provide the title of the national bird atlas published during the reporting period (field 7.1.1) with information about the year of publication (field 7.1.2) and web link or bibliographic reference (field 7.1.3).

7.2 National bird monitoring overview

Provide the title or similar plus a short description of national bird monitoring overviews published during the reporting period, including species covered, main results, etc. (field 7.2.1), with a maximum of 500 characters. Provide information about the year of publication (field 7.2.2) and web link or bibliographic reference (field 7.2.3). Fields 7.2.1 to 7.2.3 should be repeated if more than one overview has been published.

7.3 National bird red list

Provide the title of the national bird red list published during the reporting period (field 7.3.1), with information about the year of publication (field 7.3.2) and web link or bibliographic reference (field 7.3.3).

7.4 Other publications of interest for the geographical area covered by the Bern Convention (e.g. national overview of action for threatened species)

Provide the title or similar plus a short description of other publications of European-wide interest (e.g. national overview of action for threatened species) published during the reporting period, including species covered, main results, etc. (field 7.4.1), with a maximum of 500 characters. Provide information about the year of publication (field 7.4.2) and web link or bibliographic reference (field 7.4.3). Fields 7.4.1 to 7.4.3 should be repeated if more than one overview has been published, and a maximum of 10 publications should be reported.

In cases where, for instance, a national bird atlas or national red list does exist but was not published during the reporting period, countries are encouraged to provide details of the most recent publication anyway (for the benefit of the interested reader).

More general information can be provided in the free-text field under “Main achievements under Recommendation No. 16 (1986) and Resolution No. 5 (1998)” in section 1.

ANNEX B - Reporting format on species, except birds (Annex F), listed in Resolution No. 6 (1998)

Species to be reported

In general, each country should report for all species listed in Resolution No. 6 (1998) of the Bern Convention for every biogeographical or marine region in which they occur. This includes all regularly occurring species, marginal, vagrant and occasional species, species that started to occur only recently (newly arriving species) and species extinct after the Bern Convention came into force. The report is optional for species with a scientific reserve.

For the reporting period 2013-2018 countries will only report on an agreed selection of species. A checklist of those selected species and their occurrence per biogeographical or marine region and country is available on Reference Portal[4].

Names to be used for reporting

The countries are requested to use the species names as indicated in the species checklist available on the Reference Portal.

Species with marginal or irregular occurrence, extinct species

In some situations it is impossible to provide a complete assessment of the conservation status (within a country biogeographical or marine region) using the methods outlined in the evaluation matrix and this guidelines document. This is particularly the case for irregularly occurring or marginal species, whose conservation status depends on the status in the neighbouring main population, and for extinct species. To reflect the problems of reporting in these situations the species checklist distinguishes several categories of species (or more correctly, several categories of species occurrence). In general, for these categories it is often not necessary (and not possible) to fill in a complete report. An overview of the categories, indicating whether a report is expected and which parts of the report remain mandatory, is provided in Table 2. A more detailed definition of species categories can be found in Section “Occurrence categories used in the species checklist” (in chapter “Species to be reported”, in part “Definitions and methods for species reporting”).

[4] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

Table 2: Categories of species occurrence within the biogeographical/marine region and indication of the expected content of the report under Resolution No. 8 (2012)

Species category	Report	Mandatory information for report
Present regularly (PRE)	Mandatory	Full report.
Occasional (OCC)	Mandatory partial report	Whenever possible provide information for any of the fields listed below: • Distribution map (field 2.3) • Actual range – surface area (field 5.1) • Population – size estimate (field 6.2), date (field 6.1) and method used (field 6.6) • any other relevant information, e.g. whether a species had been recorded during the reporting period or an explanation why a species is treated as an occasional species (field 13.3).
Newly arriving species (ARR)	Mandatory partial report	Whenever possible provide information for any of the fields listed below: • Distribution map (field 2.3) • Actual range – surface area (field 5.1) • Population – size estimate (field 6.2), date (field 6.1) and method used (field 6.6) • Any other relevant information, e.g. information related to the potential range expansion or an explanation of why a species is treated as a newly arriving species (field 13.3).
Marginal (MAR)	Mandatory partial report	Whenever possible provide information for any of the fields listed below: • Distribution map (field 2.3) • Actual range – surface area (field 5.1) • Population – size estimate (field 6.2), date (field 6.1) and method used (field 6.6) • Information on occurrence of main population (field 13.3).
Species extinct after entry into force of the Bern Convention (EXa)	Mandatory	• Section 11 “Conclusions”. The overall conservation status is ‘unfavourable-bad’.
Species extinct prior to entry into force of the Bern Convention (EXp)	Mandatory for species with restoration project and for species of particular interest with recent signs of recolonisation	Whenever possible provide information for any of the fields listed below: • Distribution map (field 2.3) • Actual range – surface area (field 5.1) • Population – size estimate (field 6.2), date (field 6.1) and method used (field 6.6) • Section 11 “Conclusions” • Any other relevant information, e.g. information on reintroduction project or information related to recolonisation (field 13.3).
Scientific reserve (SCR)	Optional	• Any other relevant information, e.g. information on survey conducted or related to probability that the species will/will not be refound in the region (field 13.3).

Geographical exceptions from the Annex of the Resolution No. 6 (1998) (“#”-sign)

For a number of species in Resolution No. 6 (1998), a geographical exception can be asked by the country. Nevertheless, a report should be submitted for those species, as they are species of European interest. It should be noted that this interpretation is also justified in technical terms because, in order to understand and assess the European-wide/biogeographical situation of such species, the Secretariat needs information on the status of the species in all European countries (including the countries with geographical restrictions).

Hybrid populations

If hybrids between two species listed in Resolution No. 6 (1998) occur, then the hybrid population(s) should be taken into account in the reports of both species concerned. If a hybrid is between a species listed in Resolution No. 6 (1998) and a native species which is not listed in Resolution No. 6 (1998), the hybrid population should be considered part of the population in the biogeographical region if hybridisation is a part of species evolutionary history (e.g. syntopic populations of *Triturus montandoni* and *T. vulgaris* hybridise and introgression of genes resulting from hybridisation may play a role in natural selection). On the other hand, if hybridisation between a species listed in Resolution No. 6 (1998) and a native species not listed in Resolution No. 6 (1998) represents a threat to the species listed in Resolution No. 6 (1998) (e.g. loss of fertility), in this case the hybrid population should be excluded and hybridisation should be considered as a threat or pressure to species populations. If a hybrid is between a species listed in Resolution No. 6 (1998) and an alien species or a feral population, the report should not cover the hybrid population, but where appropriate this should be noted as a threat or pressure. For example, many fish species (such as *Alburnus albidus*) are threatened by hybridisation with introduced species (in this case with congeneric *A. arborella*) or wild cat populations are threatened by hybridisation with feral cats.

Field-by-field guidance for completing "Annex B" species reports

NB: To be completed for each species of the Resolution No. 6 (1998) present. For the first reporting period 2013-2018, a limited number of species is agreed[5] on. The species Report format ("species report") comprises 12 sections. Sections 1 and 2 should be provided at national level; the remaining sections are to be provided at the level of biogeographical or marine region.

NATIONAL LEVEL

1. General information
2. Maps

BIOGEOGRAPHICAL LEVEL

3. Biogeographical and marine regions
4. Range
5. Population
6. Habitat for the species
7. Main pressures and threats
8. Conservation measures
9. Future prospects
10. Conclusions
11. Emerald Network coverage for Resolution No. 6 (1998) species
12. Complementary information

In general, all sections should be completed for each species of the Resolution No. 6 (1998) present[5].

Even though not all data used in the report will be collected during the reporting period, the report should give information of relevance for the period 2013–2018.

Any free-text information has to be written in English, to facilitate the use of the information during the analysis and to allow a wider readership.

[5] A checklist of selected species for the reporting period 2013-2018, thought to be present in each country for which a report is expected is available at http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

NATIONAL LEVEL

The information below is to be provided at national level.

1 General information

The following information should be provided for each species.

1.1 Country

Select the two-digit code of your country from ISO 3166, in accordance with the list to be found on the Reference Portal[6].

1.2 Species code

Use codes (four-character sequential code) as given in the species checklist available on the Reference Portal. New codes will be allocated as necessary (for example, for species that were recently split and which are not yet included in the checklist) to ensure that all species are covered.

1.3 Species scientific name

Use the scientific name as listed in the species checklist ("recommended name"; the checklist is available on the Reference Portal).

1.4 Alternative species scientific name (optional)

If the scientific name given under field 1.3 differs from that in general national usage, countries may enter an alternative here. Similarly, if the name of a species used in the Resolution No. 6 (1998) differs from that in the species checklist on the Reference Portal, e.g. due to recent taxonomical changes, then the alternative name may be entered here.

1.5 Common name (optional)

If countries wish to enter the common (vernacular) name of the species (or subspecies) used nationally, they may do so here. This could be useful if the draft report is circulated for comments to people who may not be familiar with the scientific name, or when communicating the report with the public.

2 Maps

This section contains information on maps to be submitted together with the tabular information as a part of the report under Resolution No. 8 (2012). Apart from the mandatory distribution maps, other kinds of maps with information relevant for understanding the assessment of conservation status can also be provided.

[6] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

2.1 Sensitive species

Some species are particularly subject to, for example, illegal collecting, and making information on their distribution widely available may be detrimental to their conservation. Where information on distribution, if reported according to the specifications in field 2.3, is considered "sensitive", this can be indicated by entering "Yes" in this field.

If a species is marked as "sensitive", the Bern Convention Secretariat and the EEA will not disclose its distribution to the public (for instance, by posting this information on a publicly available database or Internet-based site).

2.2 Year or period

Enter the year (e.g. 2015) or period (e.g. 2013–2017) when the distribution was last determined.

Many reports will involve periods, because a mapping of the species distribution in most cases involves several years of fieldwork and may extend beyond the limits of the current reporting period (2013–2018). The year or period reported should cover the actual period during which the data were collected.

In some cases the distribution map will be elaborated based on data from the previous reporting period or using older distribution data that has been updated with the results of regular monitoring or using data from online-systems for collecting data. The year or period reported should be that which the reported distribution relates to.

More detailed information on year or period of data used for the distribution map can be provided in field 5.17 "Additional information".

2.3 Distribution map

Submit a distribution map, together with the relevant metadata (projection, datum, scale). The standard is:

10 x 10 km ETRS89 grid, projection ETRS LAEA 5210

The distribution map should provide information about the actual occurrences of the species, which should preferably be based on the results of a comprehensive national mapping or inventory of the species wherever possible (see Section "2 Maps" (in "Definitions and methods for species reporting"). If field data on actual occurrences of the species are not sufficient, modelling and extrapolation should be used whenever feasible[7]. The distribution map will be though composed of grids with both the actual (mapped) and presumed species occurrences.

The distribution map will consist of 10 x 10 km ETRS89 grid cells in the ETRS LAEA 5210 projection[8]. The gridded dataset will consist only of the 10 km grid cells where the species is recorded or estimated as occurring; the use of attribute data to indicate the presence or absence of a species in a grid cell is not permitted. The period over which the distribution data were collected should be

[7] If modelling or exceptionally expert opinion are used this should be noted in the field 2.4 Method used

[8] European Terrestrial Reference System 1989; Lambert Azimuthal Equal Area Latitude of origin 52N, Longitude of origin (central meridian) 10E.

included in the metadata, following the INSPIRE guidelines[9]. The technical specifications for distribution maps are given on the Reference Portal.

If more precise maps giving more detailed species distribution are available, these can be submitted as additional maps.

In some exceptional cases, such as widely ranging but poorly known cetaceans, it may be relevant to submit maps using a 50x50 km grid. For smaller countries, a 1x1 km grid (or 5x5 km) is allowed; these will then be aggregated by the ETC/BD to 10 x 10 km for visualisation at European level.

The grids for individual countries are available for download from the Reference portal[10].

2.4 Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. a dedicated mapping or survey or a robust predictive model with representative sample of occurrence data, calibration and satisfactory evaluation of its predictive performance using good data on environmental conditions across entire species range);
b) based mainly on extrapolation from a limited amount of data (e.g. other predictive models or extrapolation using less complete sample of occurrence and environmental data);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

The “Method used” should be reported as “(d) Insufficient or no data available” if the reported distribution map obtained as a result of comprehensive mapping, modelling or extrapolation or, exceptionally, expert interpretation covers less than 75 % of the presumed actual species distribution (i.e. the resulting map is incomplete in relation to the presumed species distribution).

2.5 Additional maps (optional)

Countries may also submit additional maps, for example giving more detailed distribution data (e.g. at higher resolution) or a range map (see Section “4 Range” (in “Definitions and methods for species reporting”). Any additional maps must be accompanied by the relevant metadata and details of the projection used. Note that this is an optional field and does not replace the need to provide a map in field 2.3.

Maps at a resolution other than 10 x 10 km or with grids other than the ETRS89 LAEA 5210 grid, or close to 10 x 10 km, may be reported here.

[9] For the period 2013-2018 it is not expected to provide the Resolution No. 8 (2012) spatial dataset compliant with INSPIRE requirements.
[10] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

BIOGEOGRAPHICAL LEVEL

The following sections should be completed for each biogeographical or marine region in which the species occurs. So, for example, if a species occurs in three biogeographical regions within a country, three separate reports are required.

3 Biogeographical and marine regions

3.1 Biogeographical or marine region where the species occurs

Biogeographical region or marine region concerned within the country.

- Use the following names for biogeographical regions:

Alpine	Boreal	Pannonian
Arctic	Continental	Steppic
Atlantic	Mediterranean	
Black Sea	Macaronesian	

- Use the following names for marine regions[11]:

Marine-Arctic	Marine Black Sea	Marine Macaronesian
Marine Atlantic	Marine Baltic Sea	Marine Mediterranean
Marine Caspian		

Maps and boundaries of biogeographical and marine regions can be found on the Reference Portal[12].

More information on marine regions and on species which should be reported in marine regions can be found in Section “Marine species” (in “Definitions and methods for species reporting”).

3.2 Sources of information

For information from published sources related to Sections 4 to 6 (including the published sources related to distribution maps, on which the range calculation is based) and Sections 8 to 13, provide bibliographic references or links to an Internet site(s). Use the order: author, year, title of publication, source, volume, number of pages, web address.

All Internet addresses in the reporting fields should be given in full, including the initial “http://” or “https://”, if applicable.

[11] For the reporting period 2013-2018, the species selection as available from the reference portal, does not contain marine species. This section on Marine regions will therefore not be used for the first reporting period.
[12] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

4 Range

This section provides information on range surface area, range trends and favourable reference range.

Range is defined as “the outer limits of the overall area in which a habitat type or species is found at present” and it can be considered as an envelope within which areas actually occupied occur.

The range should be calculated based on the map of the actual distribution using a standardised algorithm. A standardised process is needed to ensure repeatability of the range calculation in different reporting rounds.

It is not necessary to submit a map of the range, but the area of the range and trend in the area are required to assess this parameter. However, a map can be submitted in field 2.5 “Additional maps”.

Complementary information and methods for range calculation can be found in Section “4 Range” (in “Definitions and methods for species reporting”).

4.1 Surface area

This is the total surface area (in km²) of the current range (outer limits of the species distribution) within the biogeographical or marine region concerned. The range in the biogeographical or marine region concerned is represented by grids (10 x 10 km) which occur entirely or partly within the region (i.e. grids intersected by the boundaries of the biogeographical or marine regions are counted under both regions). In general the surface area is provided in 10 x 10 km resolution and the minimum area should be 100 km^2. For localised species with a very small range it is possible to report using a finer resolution; for example, for species restricted to a single location, the range is the area of a locality where species occurs, which can be sometimes several square metres. Decimals are allowed, as the range of some species can be very small.

The method for estimating the surface area of range is described in Section “Calculation of range” (in chapter “4 Range”, in part “Definitions and methods for species reporting”) is recommended.

4.2 Short-term trend period

Give the dates for the beginning and end of the period for which the trend has been reported. The short-term trend should be evaluated over a period of 12 years (two reporting cycles). Therefore, for the 2013–2018 reports, the period 2007–2018 or a period as close as possible to this should be considered. Thus, some flexibility is permitted, so that while trends would ideally be reported for 2007–2018, data from e.g. 2004–2015 will be accepted if the best available data relate to surveys in those years.

Further guidance is given in Section “Trends” (in “Definitions and methods for species reporting”).

4.3 Short-term trend direction

A trend is a (measure of a) directional change of a parameter over time. The range trend shows changes in the overall extent of species distribution. Although rare for range, a fluctuation (or oscillation) is not a directional change of a parameter, and therefore fluctuation is not a trend. Indicate if range trend over the period reported in field 4.2 was:

stable / increasing / decreasing / uncertain / unknown

Report “uncertain” if some data are available but are not enough to accurately determine the direction. Use “unknown” where there are no data available.

The short-term trend information is used in the evaluation matrix to undertake the conservation status assessment. Any large-scale deviation from this should be explained in field 4.12 “Additional information”.

If there is an apparent change in direction of the trend resulting from a change in monitoring methodology or improved knowledge about species distribution, it should not be considered as a trend. This apparent change should be indicated in field 4.11 “Change and reason for change in surface area of range”.

Further guidance is given in Section “Trends” (in “Definitions and methods for species reporting”).

4.4 Short-term trend magnitude (optional)

If possible, quantify the percentage change (with range at the beginning of the reporting period as 100 %) over the period reported in field 4.2. It can be given as a precise figure (e.g. 27 %) or a banded range (e.g. 20–30 %). If it is a precise figure, give the same value under “minimum” and “maximum” (field 4.4(a) and (b)).

4.5 Short-term trend – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. comparing two range maps based on accurate distribution data, or a dedicated monitoring of a species’ distribution with good statistical power);
b) based mainly on extrapolation from a limited amount of data (e.g. trends derived from species occurrence data collected for other purposes, or from data collected from only a part of the geographical range of a species, or trends based on measuring some other predictors of species distribution, such as land-cover changes or prey availability);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

4.6 Long-term trend period (optional)

The long-term trend should be evaluated over a period of 24 years (four reporting cycles). For the 2013–2018 reports, this means the period is 1994–2018 or a period as close as possible to this. Indicate the period in this field. For the 2013–2018 reports this information, and the associated fields 4.7 and 4.8, is optional.

Further guidance is given in Section “Trends” (in “Definitions and methods for species reporting”).

For guidance in filling in fields **4.7 “Long-term trend direction”, 4.8 “Long-term trend magnitude”**, and **4.9 “Long-term trend – Method used”** see fields 4.3 to 4.5 (Short-term trend).

4.10 Favourable reference range

Favourable reference range is the range within which all significant ecological variations of the species are included for a given biogeographical region and which is sufficiently large to allow the long-term survival of the species. This information is needed to evaluate the conservation status using the matrix in Annex C. In many cases it is not possible to estimate a value for favourable reference range (option a) but it is clear that the favourable reference range is greater (or much greater) than the present-day value. Using operators (option b) "greater than" (>) and "much greater than" (>>) is preferable to reporting a parameter as "unknown".

The following information is requested:

a) area in km²; or
b) if operators (≈, >, >>) were used for the assessment, indicate here with the relevant symbol (≈ "approximately equal to", > "more than", >> "much more than"); or
c) if the favourable reference range is unknown, use "x" for the reference range; and
d) indicate the method used to set the reference value (free-text field).

The field "indicate method used" (d) is mandatory if (a) area is provided, but countries are encouraged to describe the method used also when (b) operators were used.

The use of operators (b) should help to reduce the use of "unknown" to a minimum:

- if an operator (b) is used, then there is no need to insert a value in field 4.10(a) area in km²; operators indicate that the reference value is "approximately equal to", "more than" or "much more than" the current value provided in field 4.1 "Surface area (of range)";
- if the value is provided for area in km² (a) no operator should be used.

Where the reference value has changed in comparison to the previous reporting period, this should be explained in field 4.12 "Additional Information".

Favourable reference values and use of operators are discussed in more detail in Section "Favourable reference values" (in "Definitions and methods for species reporting").

4.11 Change and reason for change in surface area of range

As the reporting period 2013-2018 is the first period, there is no need to fill in this section from the previous reporting period. Although, an indication of change might be given in field 4.12 "Additional information".

This field is used to indicate if there is any change since the previous reporting period (2007–2012) in the range surface area reported and, if so, to describe the nature of this change.

First answer the question: "Is there a change between reporting periods?" (i.e. is area of range different from the last reporting period?) YES/NO.

If the answer is "Yes", indicate which of the following options apply (it is possible to reply "Yes" to more than one of the options a–c, but at least one option "Yes" must be selected for options a–d)[13]:

[13] In some cases the actual value reported for range surface area has increased, reflecting both a genuine increase in range (positive range trend) and better knowledge or data. Both options ("genuine change" and "improved knowledge or more accurate data") above should be selected. In other situations the actual value

a) yes, due to genuine change;
b) yes, due to improved knowledge/more accurate data;
c) yes, due to the use of different methods (including taxonomical change or use of different thresholds);
d) yes, but there is no information on the nature of change.

Finally, indicate whether any difference is mainly due to (select one option):

- genuine change;
- improved knowledge or more accurate data;
- the use of a different method.

If a country wishes to give further information (e.g. cases where range surface area does not change, but its borders are shifting), this can be done in field 4.12 “Additional information”.

4.12 Additional information (optional)

Additional information to help understand the information given on range can be reported here (for example, details on the use of old distribution data, use of data from the previous reporting period, use of different gap distance or range calculation method than that recommended).

5 Population

This section provides information on population size, population trends and favourable reference population.

5.1 Year or period

Enter the year or period during which the population size was last determined: YYYY (for year) and YYYY–YYYY (for period).

Many reports will involve periods, because species inventories in most cases involve several years of fieldwork and may extend beyond the limits of the current reporting period (2013–2018). The year or period reported should cover the actual period during which the data were collected.

In some cases the population size will be estimated based on a complete species census or inventory which took place during the previous reporting period or even before and that has been updated with the results of regular monitoring. The year or period reported should be that which the reported estimate of population size relates to.

More detailed information on year or period of data used for the population size can be provided in field 5.17 “Additional information”.

5.2 Population size (in reporting unit)

---

reported for range surface area has increased since the previous period due to better knowledge or data. Nevertheless, it may still be clear that the species range is actually declining, based on analyses of data from sites. The option “improved knowledge or more accurate data” above should be selected. Field 4.12 “Additional information” allows a country to provide further details on why a range estimate has increased, even though a range decline is reported.

This field refers to the total population in the biogeographical region or marine region of the country concerned. For all species, except species restricted to a single country, the population size must be reported using the reporting unit noted in the Resolution No. 6 (1998) species checklist available on the Reference Portal[14]. The reporting unit specified in the checklist is individuals or number of occupied 1x1 km grids or other agreed unit for a few arthropods and non-vascular plants. The summary of species groups for which either individuals or 1x1 km grids or alternative units are used is provided in Table 20: Population units for each species group in Section "5 Population" (in part 'Definitions and methods for species reporting").

This means that, while, for the assessment of conservation status at national level, countries should use the most suitable unit for their monitoring of individual species, they should, if necessary, convert this unit into a "reporting" unit to be reported in field 5.2 and to be used later for European biogeographical assessments. If a country wishes to report population size using a different unit this can be reported in field 5.4, but this must be in addition to the reporting unit specified in the checklist and not as an alternative.

For species occurring only in one country, a reporting unit harmonised across all the countries is not required, so the country can decide which reporting unit to use from the list of population size units[15] on the Reference Portal. In this case the population size should be reported under field 5.2 "Population size (in reporting unit)" and not under field 5.4 "Additional population size". If a species occurs in several biogeographical regions the same unit should be used across all regions. Field 5.4 "Additional population size" can be used if needed, for example to provide population size in more precise units if this is available from only one region.

Further information on the use of reporting units is provided in Section "5 Population" (in "Definitions and methods for species reporting").

If a different reporting unit is used for the assessment, the country should ensure that it can capture trends and is biologically suitable for expressing the favourable reference population.

The population size can be reported as an interval (for example, minimum and maximum value from repeated census) and/or as a best available single value. The interval size estimate (fields 5.2(b) and (c) should be given as minimum and maximum numbers. Minimum and maximum should always be entered together, i.e. not only the minimum or only the maximum.

There is also a "best single value" field (5.2(d)) where a single value (a precise value or an estimate) can be entered. In a situation where only a minimum (or maximum) value of the population size is known (e.g. through expert opinion) this should be entered in the "(d) Best single value" field and NOT the "(b) Minimum" or "(c) Maximum" fields. The source of this estimate can then be clarified in field 5.3 (see below). The numbers reported should not be rounded.

Both interval and best single value can be provided together. For example where the interval coming from the survey data is quite large (e.g. minimum and maximum values) and an expert evaluation of the actual population size is available. An expert evaluation of survey data can result in a more

[14] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

[15] The list of population size units to be used in field 5.2 "Population size (in reporting unit)" for species restricted to a single country or in field 5.4 "Additional population size" is available on the Reference Portal http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal .

accurate single value to be used in the European assessments. In other situations, the point estimate (best single value) is available and country wishes to provide the confidence limits. The confidence interval can be entered in the minimum and maximum fields. If both, interval and best single values are provided this should be explained in field 5.17 “Additional information”.

If the population size reported in field 5.2 was estimated by converting the information reported in field 5.4, information on the conversion should be given in field 5.17 “Additional information”.

For wide-ranging highly mobile marine species (e.g. whales, dolphins, turtles), use population estimates from i) regional marine Agreements such as ACCOBAMS and ASCOBANS; ii) Regional Sea Conventions (OSPAR, Helsinki, Barcelona, Bucharest); or any other estimates made in cooperation between countries sharing the same population (e.g. SCANS[16]) if available. Each country should report the results for their territory (i.e. a respective proportion of the regional population). Complementary information about assessment of transboundary species populations can be found in Section “Transboundary populations” (in “Definitions and methods for species reporting”).

5.3 Type of estimate

The type of estimate for the reported interval in fields 5.2(b) and (c) or the best single value in field 5.2(d) should be outlined here. The options for reporting on this are: best estimate, multi-year mean, 95 % confidence interval, or minimum:

- best estimate – the best available single figure (including where only the maximum value of the population size is available) or interval, derived from e.g. a population census, a compilation of figures from localities, modelled population size based on population densities and distribution data or expert opinion, but for which 95 % confidence interval could not be calculated. Whether a best estimate comes from the monitoring data, modelling or an expert opinion should be entered in field 5.6;
- multi-year mean – average value or interval where population size is monitored several times during the period provided in field 5.1;
- 95 % confidence interval – estimates derived from sample surveys or a model in which 95 % confidence limits could be calculated;
- minimum – where insufficient data exist to provide even a loosely bounded estimate, but where a population size is known to be above a certain value, or where the reported interval estimates come from a sample survey or monitoring project which probably underestimates the real population size.

If both interval (field 5.2(b) “Minimum” and field 5.2(c) “Maximum”) and a single value (field 5.2(d) “Best single value”) are provided, field 5.5 “Type of estimate” should correspond to the more accurate estimate. This should be noted in field 5.17 “Additional information”.

5.4 Additional population size (optional)

This field allows the country to report population size using units other than the unit given in the species checklist. The guidance on reporting the numbers is the same as for field 5.2. If this unit was used for the assessment of the parameter Population, the country should ensure that it can capture trends and is biologically suitable for expressing the favourable reference population.

[16] Hammond et al., 2013

The list of population size units to be used in field 5.4 “Additional population size” (or in field 5.2 “Population size (in reporting unit)” for species restricted to a single country) is available on the Reference Portal.

If the population size reported in field 5.2 was estimated by converting the information reported in field 5.4, give information on the conversion in field 5.17 “Additional information”. Field 5.4 is not a substitute for field 5.2.

5.5 Type of estimate (optional)

See instructions for field 5.3.

5.6 Population size – Method used

This field is used to describe the methodology used for calculating population size in field 5.2 or the additional population size reported in field 5.4 (in a situation where the population size in field 5.2 is converted from the value in field 5.4). Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. repeated direct counts of entire population; repeated counting based on indices of species presence; from previous complete inventory updated with robust monitoring data on trends);
b) based mainly on extrapolation from a limited amount of data (e.g. based on mark-recapture methods; using models based on abundance and distribution data; using extrapolation from sample surveys of parts of the population; or from previous inventory updated with good trend data);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

If both interval (field 5.2(b) “Minimum” and field 5.2(c) “Maximum”) and a single value (field 5.2(d) ‘Best single value’) are provided, field 5.6 ‘Method used’ should correspond to the more accurate of both estimates. This should be noted in field 5.17 “Additional information”.

5.7 Short-term trend period

Give the dates of the beginning and end of the period for which the trend has been reported. The short-term trend should be evaluated over a period of 12 years (two reporting cycles). For the 2013–2018 reports, this means the period is 2007–2018 or a period as close as possible to this. Thus, some flexibility is permitted, so that while trends would ideally be reported for 2007–2018, data from e.g. 2004–2015 will be accepted if the best available data relate to surveys in those years.

Further guidance is given in Section “Trends” (in “Definitions and methods for species reporting”).

5.8 Short-term trend direction

Trend is a (measure of a) directional change of a parameter over time. The trend in population size shows changes in the overall numbers of individuals in the biogeographical population of a species. Fluctuation (or oscillation) is not a directional change of a parameter, and therefore fluctuation is not a trend.

Indicate if the population trend over the reported period in field 5.7 was:

stable / increasing / decreasing / uncertain / unknown

Report “uncertain” if some data are available but they are not enough to accurately determine direction. Use “unknown” where there are no data available.

The short-term trend information is used in the evaluation matrix to assess the conservation status. Any large-scale deviation from this should be explained in field 5.17 “Additional information”.

If there is an apparent change in direction of the trend resulting from a change in monitoring methodology or improved knowledge about the size of a species population, it should **not** be considered a trend. This apparent change should be indicated in field 5.16 “Change and reason for change in population size”.

Further guidance is given in Section “Trends” (in “Definitions and methods for species reporting”).

5.9 Short-term trend magnitude (optional)

If possible, quantify the percentage change (with range at the beginning of the reporting period as 100 %) over the period reported in field 5.7. It can be given as a precise figure (e.g. 27 %) or a banded range (e.g. 20–30 %). If a precise figure is available give the same value under “minimum” and “maximum” (fields 5.9(a) and (b)). Where a statistically robust method has been used (see field 5.10) please provide the confidence interval (e.g. 95 %) in field 5.9(c) with the upper and lower confidence interval limits in fields 5.9(a) and 5.9(b) respectively.

5.10 Short-term trend – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. a dedicated monitoring of a species’ populations with good statistical power);
b) based mainly on extrapolation from a limited amount of data (e.g. trends derived from data collected from a limited number of sample sites; trends extrapolated from data collected for other purposes; trends extrapolated from some other indirect measurements, such as availability of a habitat);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

5.11 Long-term trend period (optional)

The long-term trend should be evaluated over a period of 24 years (four reporting cycles). For the 2013–2018 reports, this means the period is 1994–2018 or a period as close as possible to this. Indicate the period in this field. For the 2013–2018 reports, this information, together with fields 5.12 to 5.14, is optional.

Further guidance is given in Section “Trends” (in “Definitions and methods for species reporting”).

For guidance in filling in field **5.12 “Long-term trend direction”**, field **5.13 “Long-term trend magnitude”** and field **5.14 “Long-term trend – Method used”**, see fields 5.8 to 5.10 (short-term trends).

5.15 Favourable reference population

Favourable reference population is the population in a given biogeographical region considered the minimum necessary to ensure the long-term viability of the species. This information is needed to undertake the evaluation of conservation status using the evaluation matrix (Annex C). Favourable reference population should be given in the same units as that used for "Population" (field 5.2 or 5.4). In many cases it is not possible to estimate a value for favourable reference population (option a) but it is clear that the favourable reference population is greater (or much greater or, in exceptional situations, lower) than the present-day value. Using operators (option b) "greater than" (>), "much greater than" (>>) or "lower than" (<) is preferable to reporting a parameter as "unknown".

The following information is requested:

a) the population size; or
b) if operators (≈, >, >>, <) were used for the assessment, indicate here with the relevant symbol (≈ "approximately equal to", > "more than", >> "much more than", < "less than"); or
c) if the favourable reference population is unknown, use "x" for the reference population; and
d) indicate the method used to set the reference value (free-text field).

The field "indicate method used" (d) is mandatory if (a) population size is provided, but countries are encouraged to describe the method used also when (b) operators were used.

If an operator is used to estimate a favourable reference population, it should be compared with the minimum population size estimate

The operator "less than" (<) can be used only in limited cases; where a species might have developed - due to exceptional circumstances such as supplementary feeding - an exceptionally high population level far beyond that considered as favourable in normal circumstances and which is unlikely to be sustainable or which may even be detrimental to other species or habitats. If used, an explanation must be provided in field 5.17 "Additional information".

The use of (b) operators should help to reduce the use of "unknown" to a minimum:

- if an operator (b) is used, then there is no need to insert a value in field 5.15(a) "Population size"; operators indicate that the reference value is "approximately equal to", "more than", "much more than" or "less than" the current value provided in fields 5.2 or 5.4 respectively;
- if the value is provided for population size (a) no operator should be used.

Where the reference value has changed in comparison to the previous reporting period, the reason for this should be explained in field 5.17 "Additional information".

Favourable reference values and use of operators are discussed in more detail in Section "Favourable reference values" (in "Definitions and methods for species reporting").

5.16 Change and reason for change in population size

As the reporting period 2013-2018 is the first period, there is no need to fill in this section from the previous reporting period. Although an indication of change might be given in field 5.17 "Additional information".

This field is used to indicate if there is any change since the previous reporting period (2007–2012) in the population size reported and, if so, to describe the nature of this change.

First answer the question: "Is there a change between reporting periods (i.e. is population size different from the last reporting period)?" YES/NO.

If the answer is "Yes", indicate which of the following options apply (it is possible to reply "Yes" to more than one of the options a–c, but at least one option "Yes" must be selected for options a–d)[17]:

a) yes, due to genuine change;
b) yes, due to improved knowledge or more accurate data;
c) yes, due to the use of a different method (including taxonomical change or use of different thresholds);
d) yes, but there is no information on the nature of the change.

Finally, indicate whether any difference is mainly due to (select one option):

- genuine change;
- improved knowledge or more accurate data;
- the use of a different method.

If a country wishes to give further information this can be done in field 5.17 "Additional information".

5.17 Additional information (optional)

Additional information to help understand the information given on population can be reported here as free text (for example, any information on connectivity, reproduction, mortality, age structure, and genetic structure and if they deviate from normal, and how they were considered in the assessment of the status of the population).

6 Habitat for the species

This section provides information on sufficiency of habitat for the species and habitat trends.

Habitat for the species refers to the resources necessary at all stages in the life cycle of the species, for example both wintering and summer roosts, plus foraging areas, for bats. The meaning of "habitat" in "habitat for the species" is different to "habitat types" defined under Resolution No. 4 (1996) and "habitat" for habitat classifications such as EUNIS, which are more correctly biotopes. Habitat quality includes elements like the availability of prey but also fragmentation where appropriate for the species; further guidance is given in Section "6 Habitat for the species" (in "Definitions and methods for species reporting").

[17] In some cases the actual value reported for population size has increased, reflecting both a genuine increase in size (positive population trend) and better knowledge or data. Both options ("genuine change" and "improved knowledge or more accurate data") above should be selected. In other situations the actual value reported for population size has increased since the previous period due to better knowledge or data. Nevertheless, it may still be clear that the species population is actually declining, based on analyses of data from sites. The option "improved knowledge or more accurate data" above should be selected. Field 5.17 "Additional information" allows a country to provide further details on why a population size estimate has increased, even though a population decline is reported.

6.1 Sufficiency of area and quality of occupied habitat

a) Are area and quality of the occupied habitat sufficient (for the long-term survival)? YES/NO/Unknown.
b) If "No", is there a sufficiently large area of unoccupied habitat of suitable quality (for the long-term survival)? YES/NO/Unknown.

The Report format asks for information on the sufficiency of habitat area and quality. These questions are aimed at identifying species for which habitat area and/or habitat quality is a limiting factor for not achieving a favourable conservation status.

While area and quality are treated separately at national level, it is necessary to combine these two factors when reporting at a biogeographical level, which is why they are addressed together in field 6.1. Any further information, including the separate assessment of sufficiency of habitat area and quality, can be provided in field 6.9 "Additional information".

6.2 Sufficiency of area and quality of occupied habitat – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. complete mapping or inventory of habitat for the species including assessment of habitat quality, or inventory of a species' habitats combined with robust extrapolation of habitat quality, or previous complete inventory updated with information from robust monitoring);
b) based mainly on extrapolation from a limited amount of data (e.g. using modelling or extrapolation from detailed surveys of parts of the species' distribution);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

6.3 Short-term trend period

Give the dates of the beginning and end of the period for which the trend has been reported. The short-term trend should be evaluated over a period of 12 years (two reporting cycles). For the 2013–2018 reports, this means the period is 2007–2018 or a period as close as possible to this. Thus, some flexibility is permitted, so that while trends would ideally be reported for 2007–2018, data from e.g. 2004–2015 will be accepted if the best available data relate to surveys in those years.

Further guidance is given in Section "Trends" (in "Definitions and methods for species reporting").

6.4 Short-term trend direction

A trend is a (measure of a) directional change of a parameter over time. The trend in habitat for the species describes changes in overall area and quality of the occupied habitat. Fluctuation (or oscillation) is not a directional change of a parameter, and therefore fluctuation is not a trend.

Indicate if the trend in habitat for the species over the reported period in field 6.3 was:

stable / increasing / decreasing / uncertain / unknown

The assessment of habitat for the species considers both quality and area. Trend direction should be assessed by using the combinations in Table 3 below (area/quality).

Table 3: Assessing trend direction of habitat for the species

Reported trend	Relation to area/quality status
stable	**Both trends are stable** Area "stable" /quality "stable"
increasing	**One or both trends are increasing or stable** Area "increasing" / quality "increasing" Area "increasing" / quality "stable" Area "stable" / quality "increasing"
decreasing	**One or both trends are decreasing** Area "decreasing" / quality "decreasing" Area "decreasing" / quality "stable" Area "decreasing" / quality "unknown" Area "stable" / quality "decreasing" Area "unknown" / quality "decreasing"
unknown	**At least one trend is unknown and non-decreasing or there is no dominating trend** Area "unknown" / quality "unknown" Area "unknown" / quality "increasing" Area "unknown" / quality "stable" Area "increasing" / quality "unknown" Area "stable" / quality "unknown" Area "increasing" / habitat "decreasing" (if better data are not available) Area "decreasing" / habitat "increasing" (if better data are not available)

Note: "unknown" in the table above includes both "unknown" and "uncertain".

The short-term trend information should be used in the evaluation matrix to undertake the conservation status assessment. Any large-scale deviation from this should be explained in field 6.9 "Additional information".

If there is an apparent change in the direction of the trend resulting from a change in monitoring methodology or improved knowledge about area or quality of habitat for species, it should not be considered a trend.

6.5 Short-term trend – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. dedicated monitoring of both habitat area and quality with good statistical power);
b) based mainly on extrapolation from a limited amount of data (e.g. trends derived from data collected from a limited number of sample sites; trends extrapolated from data collected for other purposes; trends extrapolated from some other indirect measurements);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose ate the category for the most important source of data.

6.6 Long-term trend period (optional)

The long-term trend should be evaluated over a period of 24 years (four reporting cycles). For the 2013–2018 reports, this means the period is 1994–2018 or a period as close as possible to this. Indicate the period in this field. For the 2013–2018 reports this information is optional. Fields 6.7 and 6.8 are optional as well.

Further guidance is given in Section “Trends” (in “Definitions and methods for species reporting”).

For guidance in filling in field **6.7 “Long-term trend direction”** and field **6.8 “Long-term trend method used”**, see fields 6.4 and 6.5 (short-term trends).

6.9 Additional information (optional)

Additional information to help understand the information given on habitat for the species can be reported here (for example information on fragmentation).

7 Main pressures and threats

This section provides information on main pressures and threats. A list of pressures and/or threats should be provided and for each pressure/threat a ranking of its impact on the conservation status of species is also required.

Pressures have acted within the current reporting period and they have an impact on the long-term viability of the species or its habitat(s); threats are future/foreseeable impacts (within the next two reporting periods) that are likely to affect the long-term viability of the species and/or its habitat(s) (see Table 4). The threats should not cover theoretical threats, but rather those issues judged to be reasonably likely. This may include continuation of pressures.

Table 4: Definition of pressure and threat (in the context of reporting under Resolution No. 8 (2012))

	Period of action/definition	Time-frame
Pressure	Acting now and/or during (any part of or all of) the current reporting period.	Current six-year reporting period.
Threat	Factors expected to act in the future after the current reporting period.	Future two reporting periods, i.e. within 12 years following the end of the current reporting period.

7.1 Characterisation of pressures/threats

Provide a list of pressures and/or threats and a ranking of their impact: list a maximum of 10 pressures and a maximum of 10 threats. Only pressures/threats of high ("H") and of medium ("M") importance, as defined in Table 5 below, should be reported.

For each species:

a) select from the list of pressures/threats a maximum of 10 entries for each of pressures and threats using the code at the second level of the hierarchical list. The list of pressures and threats is available on the Reference Portal[18];

b) for each pressure and threat, indicate its ranking, i.e. "H" for High, "M" for Medium, under both "Pressure" and "Threat". For example if a factor selected from the list represents both a pressure and a threat, "H" or "M" should be reported under both headings as appropriate. If it represents a pressure but not a threat, "H" or "M" should be reported under "Pressure" and "Threat" left blank. A maximum of five high-level pressures and five high-level threats should be noted. This will make it possible to identify the most important factors at a European scale.

Table 5: Definition of High and Medium ranked pressures/threats

Code	Meaning	Comment
H	High importance/impact	Important direct or immediate influence and/or acting over large areas (a pressure is the major cause or one of the major causes, if acting in combination with other pressures, of significant decline of population size, range or habitat area or deterioration of habitat quality at the biogeographical scale; or pressure acting over large areas preventing the species population or habitat from being restored at Favourable conservation status at the biogeographical scale).
M	Medium importance/impact	Medium direct or immediate influence, mainly indirect influence and/or acting over moderate part of the area/acting only regionally (other pressure not directly or immediately causing significant declines).

[18] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

The impact of the pressure should reflect the influence of a pressure or threat on conservation status of the species. Only pressures that have an important direct or immediate influence on one or several parameters of conservation status at the biogeographical scale (causing significant decline or deterioration or preventing species from reaching favourable status, see Table 6 above) should be ranked as "high". However, it is likely that species with Favourable conservation status or where only very localised or slight declines were recorded will not have high importance pressures (unless the pressures are counteracted with measures). The maximum number of "high" ranked pressures and/or threats that can be reported is five, even if more could be considered. This, together with any other information related to pressures and threats, can be noted in field 7.3 "Additional information"

Table 6 provides an example of pressures and threats characterisation using a maximum of five pressures of High importance.

Table 6: An example of pressures and threats characterisation.

Characterisation of pressures/threats		
a) Pressure/threat *List a maximum of 10 pressures and a maximum of 10 threats using the code list provided on the Reference Portal*	**b) Ranking of pressure/threat** *Indicate whether the pressure/threat is of:* *H = high importance (maximum 5 entries for pressures and 5 entries for threats)* *M = medium importance*	
	Pressure	**Threat**
A14 Application of synthetic fertilisers	H	H
A22 Active abstractions from groundwater, surface water or mixed water for agriculture	M	-
B05 Clear-cutting, removal of all trees	H	M
D01 Roads, paths railroads and related infrastructure (e.g. bridges, viaducts, tunnels)	H	H
D05 Electricity and communication infrastructure (e.g. phone lines, masts and antennas)	H	M
E01 Conversion from other land uses to housing and settlement areas (excl. drainage)	M	H
I02 Problematic native plants and animals	H	H
K04 Natural processes of eutrophication or acidification	-	M

Note that the example is only illustrative since it uses draft codes that may not be retained as such in the final list of pressures and threats.

Keeping in mind that some of the species move over quite large areas (or are migratory), status and trends reported in a particular country may reflect the effects of pressures and threats from outside the country (e.g. the impact of hunting in a neighbouring country on marginal species population). Likewise, species can be affected by pressures and threats originating from outside the country (e.g.

pollution or nitrogen deposition). The list of pressures and threats has codes to address the transboundary effect of pressures and threats: "XO threats and pressures from outside the country "and "XE threats and pressures from outside the EU or Emerald countries' territory".

More detailed guidance on reporting pressures and threats is provided in Section "7 Main pressures and threats" (in "Definitions and methods for species reporting") and in the notes in the list of pressures and threats available from the Reference Portal.

7.2 Sources of information (optional)

Provide sources of information relevant to Section 7 (optional) with URL, metadata, or supporting evidence for the highest ranking pressures only (i.e. High importance).

7.3 Additional information (optional)

If a country wishes to give additional information on the nature of a certain pressure/threat, this can be provided in this field.

8 Conservation measures

This section concerns information on conservation measures, including management plans, taken to maintain or to restore the species at Favourable conservation status.

The section contains a list of measures and their evaluation. The evaluation is an overall assessment and not a measure-by-measure evaluation.

8.1 Status of measures

Select whether measures are needed or not. If the answer is "Yes, measures are needed", then proceed to answer the following three questions:

a) measures identified but none yet taken? (YES/NO); or
b) measures identified and taken? (YES/NO); or
c) measures needed but cannot be identified? (YES/NO).

Measures may be implemented at different points in time. Choose option (a) if the majority of the most important measures identified have not yet been taken; Choose option (b) if the majority of the most important measures have already been or are being implemented.

8.2 Main purpose of the measures taken

Indicate the main purpose of the measures taken. This part should only be filled in if the conservation measures have been taken (field 8.1(b) "Measures identified and taken" is marked "Yes"). Even if several purposes can be identified, please indicate only the main one in terms of implementing the measures.

a) maintain the current range, population and/or habitat for the species;
b) expand the current range of the species (related to "Range");
c) increase the population size and/or improve population dynamics (improve reproduction success, reduce mortality, improve age/sex structure) (related to "Population");
d) restore the habitat of the species (related to "Habitat for the species").

8.3 Location of the measures taken

If the reply to field 8.1(b) “Measures identified and taken” is “Yes”, indicate where the measures are mostly being implemented:

a) only inside the Emerald Network;
b) both inside and outside the Emerald Network;
c) only outside the Emerald Network.

This field tries to capture where the main focus of the conservation action is taking place. Therefore, choose option (a) if all, or the vast majority, of the conservation measures are restricted to the Emerald Network, option (b) if there is a proportional investment in the implementation of measures inside and outside the Emerald Network, and option (c) if all, or the vast majority, of the measures are taken outside the Emerald Network.

8.4 Response to the measures

Provide an estimate of when the measures taken will start, or are expected to start, to neutralise the pressure and to produce positive effects (with regard to the main purpose of the measures indicated in field 8.2). Choose one option from:

a) short-term results (within the current reporting period, 2013–2018);
b) medium-term results (within the next two reporting periods, 2019–2030);
c) long-term results (after 2030).

8.5 List of main conservation measures

List a maximum of 10 conservation measures using the code provided on the Reference Portal[19].

More detailed guidance on the use of conservation measures is provided in Section “8 Conservation measures” (in “Definitions and methods for species reporting”) and in the notes in the list of conservation measures available from the Reference Portal.

8.6 Additional information (optional)

Additional information to help understand the information given on conservation measures can be reported here.

9 Future prospects

This section provides information on the future prospects of three parameters (Range, Population and Habitat of the species). Future prospects indicate the direction of expected change in conservation status in the near future based on a consideration of the current status, reported pressures and threats, and measures being taken for each of the other three parameters (Range, Population and Habitat of the species). More information is provided in Section “9 Future prospects” (in “Definitions and methods for species reporting”).

[19] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

9.1 Future prospects of parameters

For each parameter (Range, Population and Habitat of the species) indicate if the prospects are “good”, “poor”, “bad” or “unknown”. Future prospects of each of the three parameters should principally reflect the future trends which are the result of the balance between threats and conservation measures. The future prospects should be assessed in relation to the current conservation status. For example, the impact of future improvement on the assessment of future prospects of a parameter will be different if the current status is “favourable” or “unfavourable-bad”.

An evaluation method is provided in Section “Assessing future prospects” (in chapter “9 Future prospects” in part “Definitions and methods for species reporting”).

9.2 Additional information (optional)

Additional information to help understand how future prospects were assessed can be reported here.

10 Conclusions

This section includes the assessment of conservation status at the end of the reporting period in the biogeographical region or marine region concerned. It is derived from the matrix in Annex C.

Give the result of the assessment for each parameter of conservation status using the four categories available: “favourable” (FV), “unfavourable-inadequate” (U1), “unfavourable-bad” (U2) and “unknown” (XX).

The conservation status of parameters is assessed using the criteria in the evaluation matrix (Annex C of the Report format). Sections 10.1 to 10.5 provide an overview of the assessment criteria for each of the parameters of conservation status. In addition, several complementary assumptions and criteria are outlined in these guidelines which aim at harmonising and facilitating the assessment of conservation status. For each parameter these complementary assumptions and criteria are summarised under the heading “Complementary remarks”.

10.1 Range

Give the result of the assessment of the status for Range using the four categories available: “favourable” (FV), “unfavourable-inadequate” (U1), “unfavourable-bad” (U2) and “unknown” (XX).

Conservation status	**Assessment criteria**
Favourable (FV)	According to the evaluation matrix (Annex C) the status of Range is “favourable” if: • the trend is stable (loss and expansion in balance) or increasing; and • range surface area (field 4.1) is not smaller than the favourable reference range (field 4.10). Complementary remarks: 1. The trend over the short-term trend period (field 4.2) should be used for the status assessment. 2. The status of Range should not be favourable if any large-scale changes resulting from human pressures but not impacting the range surface area (e.g. shifts of range boundaries) were recorded.
Unfavourable-inadequate (U1)	According to the evaluation matrix (Annex C) the status of Range is “unfavourable-inadequate” if: • any other combination (other combination of criteria than for “favourable” or “unfavourable-bad”) Complementary remarks: 1. The evaluation matrix does not include explicit criteria for “unfavourable-inadequate” status of Range. However, taking into account the criteria for “favourable” and “unfavourable-bad”, the status of Range should be considered as “unfavourable-inadequate” if: • a decline equivalent to a loss of less than 1 % per year; or • range surface area (field 4.1) is less than 10 % below favourable reference range (field 4.10). 2. The trend over the short-term trend period (field 4.2) should be used for the status assessment.
Unfavourable-bad (U2)	According to the evaluation matrix (Annex C) the status of Range is “unfavourable-bad” if: • a large decline equivalent to a loss of more than 1 % per year within the period specified by the country; or • range surface area (field 4.1) is more than 10 % below favourable reference range (field 4.10). Complementary remarks: The trend over the short-term trend period (field 4.2) should be used for the status assessment.
Unknown (XX)	According to the evaluation matrix (Annex C) the status of Range is “unknown” if: • there is no or insufficient reliable information available.

10.2 Population

Give the result of the assessment of the status of Population using the four categories available: “favourable” (FV), “unfavourable-inadequate” (U1), “unfavourable-bad” (U2) and “unknown” (XX).

Conservation status	**Assessment criteria**
Favourable (FV)	According to the evaluation matrix (Annex C) the status of Population is “favourable” if: • population size (fields 5.2 or 5.4) is not smaller than the favourable reference population (field 5.15); and • the age structure, mortality and reproduction are not deviating from normal. Complementary remarks: 1. Age structure, mortality and reproduction not deviating from normal are those of a natural, self-sustaining population (for example, with no recorded or anticipated problems with recruitment). 2. Although the evaluation matrix does not explicitly mention population trend as a criterion for “favourable” status (unlike for two other parameters), situations where the population trend is negative and the population status is still “favourable” will be rare. A population decline often reflects a negative impact of pressures on mortality and/or reproduction. Furthermore, Article 1(i) of the Directive requires that population dynamics data of the species indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats. Therefore, for a species to be in a “favourable status”, the population trend should not be declining unless the actual population size is safely above the favourable reference population size. As for the remaining parameters, the trend over the short-term trend period (field 5.7) should be used for the status assessment. 3. Although the evaluation matrix does not explicitly mention the genetic variability of the species, the requirement for long-term maintenance of a species suggests that the genetic variability should be that of a self-sustaining population.
Unfavourable-inadequate (U1)	According to the evaluation matrix (Annex C) the status of Population is “unfavourable-inadequate” if: • any other combination (other combination of criteria than for “favourable” or “unfavourable-bad”). Complementary remarks: 1. The evaluation matrix does not include explicit criteria for “unfavourable-inadequate” status of Population. However, taking into account criteria for “favourable” and “unfavourable-bad”, the status of Population should be considered “unfavourable-inadequate” if: • a moderate decline equivalent to a loss of less than 1 % per year and equal to or below “favourable reference population”; or • a large decline equivalent to a loss of more than 1 % per year and above or equal to “favourable reference population”; or • population size (fields 5.2 or 5.4) is less than 25 % below favourable reference population (field 5.15); or • age structure somehow different from a natural, self-sustaining population. 2. The trend over the short-term trend period (field 5.7) should be used for the status

	assessment.
Unfavourable-bad (U2)	According to the evaluation matrix (Annex C) the status of Population is “unfavourable-bad” if: • a large decline equivalent to a loss of more than 1 % per year within the period specified by the Country and below “favourable reference population”; or • population size (fields 5.2 or 5.4) is more than 25 % below favourable reference population (field 5.15); or • reproduction, mortality and age structure are markedly different from normal. Complementary remarks: 1. Reproduction, mortality and age structure markedly different from normal should be interpreted as markedly different from a natural, self-sustaining population (for example, a higher than normal proportion of old individuals or a lack of reproducing adults or a lack of offspring). 2. The trend over the short-term trend period (field 5.7) should be used for the status assessment.
Unknown (XX)	According to the evaluation matrix (Annex C) the status of Population is “unknown” if: • there is no or insufficient reliable information available.

10.3 Habitat for the species

Give the result of the assessment of the status of Habitat for the species using the four categories available: “favourable” (FV), “unfavourable-inadequate” (U1), “unfavourable-bad” (U2) and “unknown” (XX).

Conservation status	**Assessment criteria**
Favourable (FV)	According to the evaluation matrix (Annex C) the status of Habitat for the species is “favourable” if: • area of the habitat is sufficiently large (field 6.1); and • area of the habitat is stable or increasing; and • habitat quality is suitable for the long-term survival of the species (field 6.1). Complementary remarks: 1. The area of habitat can be considered “sufficiently large” and habitat quality “suitable” if any of the questions under field 6.1 “Sufficiency of area and quality of occupied habitat” are answered “Yes” (“Are area and quality of the occupied habitat sufficient for long-term survival?” And “If no, is there a sufficiently large area of unoccupied habitat of suitable quality for long-term survival?”). If the answer to any of these questions is “Yes”, it is likely that the habitat availability or quality is not a limiting factor for the long-term viability of the species. 2. The trend in habitat for the species used for the assessment of the status (field 6.4) has both a qualitative and quantitative component, so the status can only be “favourable” if there is neither decline in habitat area nor deterioration of habitat quality. 3. The trend over the short-term trend period (field 6.3) should be used for the status

	assessments. 4. Although the evaluation matrix does not mention fragmentation of habitat, this should not be having a negative impact on the functioning of population. As such, fragmentation should be considered when evaluating the quality of the habitat.
Unfavourable-inadequate (U1)	According to the evaluation matrix (Annex C) the status of Habitat for the species is "unfavourable-inadequate" if: • any other combination (other combination of criteria than for "favourable" or "unfavourable-bad"). Complementary remarks: The evaluation matrix does not include explicit criteria for "unfavourable-inadequate" status of Habitat for the species. However, taking into account criteria for "favourable" and "unfavourable-bad", the status of Habitat for the species should be considered "unfavourable-inadequate" if: • area of habitat is not sufficiently large in some way to ensure the long-term survival of the species; or • habitat quality is not adequate, in some way not allowing long-term survival of the species; or • habitat area is declining or habitat quality is deteriorating.
Unfavourable-bad (U2)	The status of Habitat for the species is "unfavourable-bad" if: • the area of habitat is clearly not sufficiently large to ensure the long-term survival of the species; or • habitat quality is bad, clearly not allowing long-term survival of the species.
Unknown (XX)	According to the evaluation matrix (Annex C) the status of Habitat for the species is "unknown" if: • there is no or insufficient reliable information available.

10.4 Future prospects

Give the result of the assessment of the status of Future prospects using the four categories available: "favourable" (FV), "unfavourable-inadequate" (U1), "unfavourable-bad" (U2) and "unknown" (XX).

Conservation status	**Assessment criteria**
Favourable (FV)	According to the evaluation matrix (Annex C) the status of Future prospects is "favourable" if: • main pressures and threats to the species are not significant and species will remain viable in the long-term. Complementary remarks: The Future prospects should be assessed as "favourable" if all parameters have good prospects (field 9.1), or if prospects of one parameter are "unknown" while the other parameters have good prospects. The matrix for combining the prospects of three parameters to give overall status of Future prospects is provided in Table 7: Combining the evaluation of the three parameters to give Future prospects for a species in Section

	"9 Future prospects" (in "Definitions and methods for species reporting" part).
Unfavourable-inadequate (U1)	According to the evaluation matrix (Annex C) the status of Future prospects is "unfavourable-inadequate" if: • any other combination (other combination of criteria than for "favourable" or "unfavourable-bad"). Complementary remarks: The evaluation matrix does not include explicit criteria for "unfavourable-inadequate" status of future prospects. However, taking into account the method for assessing the Future prospects proposed in these guidelines, the status should be considered "unfavourable-inadequate" if the prospects of one or more parameters (field 9.1) are poor, none has bad prospects and there is at most one parameter with "unknown" prospects.
Unfavourable-bad (U2)	According to the evaluation matrix (Annex C) the status of Future prospects is "unfavourable-bad" if: • there is severe influence of pressures and threats to the species, prospects for its future are very bad and long-term viability is at risk. Complementary remarks: The Future prospects should be assessed as "unfavourable-bad" if one or more parameters have bad prospects (field 9.1).
Unknown (XX)	According to the evaluation matrix (Annex C) the status of Future prospects is "unknown" if: • there is no or insufficient reliable information available. Complementary remarks: The Future prospects should be assessed as "unknown" if two or more parameters have "unknown" prospects and no parameter has bad prospects (field 9.1).

10.5 Overall assessment of conservation status

Give the result of the overall assessment of conservation status using the four categories available: "favourable", "unfavourable-inadequate", "unfavourable-bad" and "unknown", based on the evaluation matrix for assessing conservation status for a species.

Status of parameters	All "favourable", or three "favourable" and one "unknown"	One or more "inadequate", but no "bad"	One or more "bad"	Two or more "unknown" combined with "favourable" or all "unknown"
Overall assessment of CS	"favourable"	"unfavourable-inadequate"	"unfavourable-bad"	"unknown"

10.6 Overall trend in conservation status

If the overall assessment of conservation status reported in field 10.5 is “favourable”, “inadequate” or “bad”, indicate its trend (qualifier) as follows:

improving / deteriorating / stable / unknown

The qualifier should be based on trends (for Range, Population and Habitat for the species) over the reporting period (2013–2018). As the trends over the reporting period are often not available, short-term trends can be used to assess the trend in the conservation status, unless there is evidence that the trend during the reporting period is different than a measured short-term trend (e.g. if after past decline of a species population over the reporting period 2007–2012 the population trend has stabilised, the qualifier should be assessed as “stable” even though the population trend is “decreasing”; this should be explained in field 11.8 “Additional information”). The (short-term) trends should be combined using Table 7 below.

Table 7: Assessing overall trend in conservation status of a species by combining trends for parameters

Short-term trend of parameters (Range, Population, Habitat for the species				**Overall trend in CS**
Number increasing	**Number stable**	**Number decreasing**	**Number unknown**	
3	0	0	0	Improving
2	1	0	0	
1	2	0	0	*(Only increasing and stable trends)*
0	3	0	0	Stable
2	0	1	0	
2	0	0	1	*(Only stable trends or stable and increasing dominates (there is at least one increasing and only one unknown or decreasing)).*
1	1	1*	0	
1	1	0	1	** Trend magnitude should also be considered. The overall trend in CS is stable only in case of moderate declines (< 1 % per year).*
0	0	3	0	Deteriorating
1	0	2	0	
0	1	2	0	*(Decreasing trends dominate)*
0	0	2	1	** Trend magnitude should also be considered. The overall trend in CS is declining only in case of important declines (> 1 % per year).*
0	2	1	0	
1	1	1*	0	
0	0	0	3	Unknown
1	0	0	2	
0	1	0	2	*(Unknown trends dominate)*
0	0	1	2	
1	0	1	1	
0	1	1	1	

Note: “unknown” in the table above includes both “unknown” and “uncertain”.

10.7 Change and reasons for change in conservation status and conservation status trend

This field is used to indicate if there is any change since the previous reporting period (2007–2012) in conservation status and/or in trend in conservation status and, if yes, the reason for this change.

First answer the question "(a) no, there is no difference" (Yes if there is a difference and No if there is not) separately for overall assessment of conservation status and overall trend in conservation status.

If the answer to the initial question is "Yes", indicate which of the following options apply (separately for the overall assessment of conservation status and overall trend in conservation status; it is possible to reply "Yes" to more than one of the options b-d , but at least one option "Yes" must be selected for options b-e):

b) yes, due to genuine change;
c) yes, due to improved knowledge/more accurate data;
d) yes, due to the use of different method (including taxonomical change or use of different thresholds);
e) yes, but there is no information on the nature of change.

Finally, indicate (separately for overall assessment of conservation status and overall trend in conservation status) whether any difference is mainly due to:

- genuine change;
- improved knowledge or more accurate data;
- the use of a different method.

If a country wishes to give further information, this can be done in field 10.8 "Additional information".

10.8 Additional information (optional)

Additional information to help understand the information in fields 10.1 to 10.7.

11 Emerald Network coverage for Resolution No. 6 (1998) on species

This section provides information on population size and population trend within the Emerald Network. The requested information should cover the proposed Emerald Sites, Emerald Candidate Sites and Adopted Sites within the biogeographical/marine region concerned.

The information relates to all Emerald sites where the Resolution No. 6 (1998) on species is present, not only those sites where the species is declared as a target species or a conservation objective.

See background information in Section "11 Emerald Network coverage for Resolution No. 6 (1998) on species" (in "Definitions and methods for species reporting").

11.1 Population size inside the Emerald Network

Indicate the population size within the network in the biogeographical or marine region concerned, including all sites where the species is present. Use the same unit as in field 5.2 "Population size (in reporting unit)" [20] and follow the same guidance as for the population size estimates in field 5.2.

Some species are mainly present inside the network during a period of the year (e.g. wintering or reproducing) and largely outside the network for the rest of the year (bats in particular). As Emerald sites are often the most important sites for these species, the population size within the Emerald Network should include populations which are only present within sites for part of the year.

Similarly, different Emerald sites can cover different life stages (there are sites with hibernating or reproducing populations, but also sites which only include foraging habitats). The population size within the Emerald Network should include all sites proposed for reproducing, hibernating or foraging/staging populations or individuals.

11.2 Type of estimate

The type of estimate for the interval reported in fields 11.1(b) and (c) or the best single value in field 11.1(d) should be outlined here. The options for reporting this are: best estimate, multi-year mean, 95 % confidence interval, or minimum.

Follow the same guidance as for the "Type of estimate" for the Population size (field 5.3).

11.3 Population size inside the network – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. repeated direct counts of entire population; repeated counting based on indices of species presence; from previous complete inventory updated with robust monitoring data on trends);
b) based mainly on extrapolation from a limited amount of data (e.g. based on mark-recapture methods, or using models based on abundance and distribution data, or using extrapolation from sample surveys of parts of the population, or from previous inventory updated with good trend data);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

Follow the same guidance as for the "Method used" for the Population size (field 5.6).

11.4 Short-term trend of population size within the network – Direction

A trend is a (measure of a) directional change of a parameter over time. The trend in population size informs on changes in overall numbers of specimens within the Emerald sites. Fluctuation (or oscillation) is not a directional change of a parameter, and therefore fluctuation is not a trend.

---

[20] The "reporting unit" from the Resolution No. 8 (2012) checklist available on the Reference Portal http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal .

Indicate whether the trend of population size is:

stable / increasing / decreasing / uncertain / unknown

Short-term trend within the Emerald Network should be assessed over the period indicated in field 5.7.

See instructions for field 5.8 “Short-term trend direction”.

11.5 Short-term trend of population size within the network – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. dedicated monitoring of a species’ populations with good statistical power);
b) based mainly on extrapolation from a limited amount of data (e.g. trends derived from data collected from a limited number of sample sites; trends extrapolated from data collected for other purposes; trends extrapolated from some other indirect measurements, such as availability of a habitat);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

11.6 Additional information (optional)

Additional information to help understand how Emerald covers the species can be reported here.

12 Complementary information

This section is optional and is a place to include any additional or supplementary information.

12.1 Justification of % thresholds for trends (optional)

The indicative suggested threshold for a large decline given in the evaluation matrix (Annex C) is 1 % per year. If another threshold has been used for the assessment, please give details, including an explanation of why.

12.2 Transboundary assessment (optional)

Where a joint conservation status assessment is made between two countries, i.e. where there is a wide-ranging transboundary species population, further detailed information can be given here. The information to provide is:

- Countries involved (use code list on the Reference Portal) including EU countries;
- parameters assessed in the transboundary area (usually Range and Population);
- the % of the total population in the country concerned;
- list of joint management measures;
- references/links, if available.

Further information on assessment of transboundary populations can be found in Section "Transboundary populations" (in "Definitions and methods for species reporting").

12.3 Other relevant information (optional)

Include any other information thought relevant to the species report and to assessing conservation status.

ANNEX C – EVALUATION MATRIX FOR ASSESSING CONSERVATION STATUS OF A SPECIES

The matrix is an aid to assessing the conservation status of a species. It shall be used for each biogeographical or marine region in which the species is present. The results of using the matrix have to be provided in Section “10 Conclusions” (in “Field-by-field guidance for species reports”).

ANNEX D – REPORT FORMAT ON THE "MAIN RESULTS OF THE SURVEILLANCE UNDER ARTICLE 11" FOR ANNEX I HABITAT TYPES

Habitats to be reported

In general, each country should report all habitats listed in Resolution No. 4 (1996) for every biogeographical or marine region in which they occur (see also next paragraph).

The listed habitats can be both biotopes and biotope complexes, and sometimes a habitat is a component of another habitat. As a result patches of one or more habitats can occur within another Resolution No. 4 (1996) on habitats. More information on how to report for those overlapping habitats can be found in Section "Overlapping habitats" (in chapter "Habitats to be reported" in part "Definitions and methods for habitat reporting").

A report is optional for habitats with a scientific reserve. A checklist of habitats covered by the Resolution No. 4 (1996) and their estimated occurrence per biogeographical region and country is available on the Reference Portal[21].

Most habitats are clearly present or absent, but to cover all possibilities the habitats checklist also distinguishes habitats with "marginal occurrence" and where there is some uncertainty of status ("scientific reserve"). An overview of the categories in the habitat checklist, with an indication of whether a report is expected and which parts of the report remain mandatory, is given in Table 9. A detailed definition of habitat categories can be found in Section "Occurence categories used in the habitat checklist" (in chapter "Habitats to be reported" in part "Definitions and methods for habitat reporting").

For the first reporting period (2013-2018) it has been decided to only report on a selection of habitats. The list can be found on the Emerald Reference Portal.

Table 8: Categories of habitat occurrence within the biogeographical region of the Country and indication of the expected content of the Resolution No. 8 (2012)

Habitat category (code)	Report	Mandatory information for report
Present regularly (PRE)	Mandatory	Full report.
Marginal (MAR)	Mandatory partial report	Whenever possible provide information for any of the fields listed below: • Distribution map (field 2.2) • Actual range – surface area (field 4.1). • Area covered by habitat - surface area (field 5.2) and date (field 5.1) and method used (field 5.4).
Scientific reserve (SCR)	Optional	• Any other relevant information, e.g. related to the problems of habitat interpretation (field 12.2).

[21] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

Field-by-field guidance for completing "Annex D" Habitat reports

NB: To be completed for each selected habitat[22] present in Resolution No. 4 (1996).

The free text information in the different fields is written in English to facilitate the further use of information in the European analysis and to allow a wider readership.

Even though not all data used in the report will be collected during the reporting period, the report should give information of relevance for the period 2013–2018.

NATIONAL LEVEL

The following information is to be provided at the national level:

1 General information

1.1 Country

Select the two-digit code for your Country from ISO 3166 in accordance with the list to be found on the Reference Portal[23].

1.2 Habitat code

Use the code given in the habitats checklist (see the Reference Portal; these are the same codes as in the Resolution No. 4 (1996) and also as in the 2015 edition of the Interpretation Manual[24]). Do not use any other coding systems.

Reports are expected for each biogeographical region for which the habitat type is listed in the checklist for reporting (for marginal occurrence see "Habitats to be reported" (in "Definitions and methods for habitat reporting")).

2 Maps

This section contains information on maps to be submitted together with the tabular information as a part of the Resolution No. 8 (2012). A part from the mandatory distribution map, other kinds of maps with information relevant for understanding the assessment of conservation status can also be provided.

2.1 Year or period

Enter the year (e.g. 2015) or period (e.g. 2013–2017) when the distribution was last determined.

Many reports will involve periods, because a mapping of the habitat distribution in most cases involves several years of fieldwork and may extend beyond the limits of the current reporting period

[22] A checklist of selected habitats for which a report is expected is available at http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

[23] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

[24] *Interpretation manual of Resolution No. 4 (1996) habitats:* https://wcd.coe.int/ViewDoc.jsp?p=&id=2352519&Site=&BackColorInternet=B9BDEE&BackColorIntranet=FFCD4F&BackColorLogged=FFC679&direct=true

(2013–2018). The year or period reported should cover the actual period during which the data were collected.

In some cases the distribution map will be elaborated based on data from the previous reporting period or using older distribution data that has been updated with the results of regular monitoring or using data from online-systems for collecting data. The year or period reported should be that which the reported distribution relates to.

More detailed information on year or period of data used for the distribution map can be provided in field 4.12 “Additional information”.

2.2 Distribution map

Submit a distribution map, together with the relevant metadata (projection, datum, scale). The standard is:

10 x 10 km ETRS89 grid, projection ETRS LAEA 5210

The distribution map should provide information about the actual occurrences of the habitat, which should preferably be based on the results of a comprehensive national mapping or inventory of the habitat wherever possible (see Section “2 Maps” (in “Definitions and methods for habitat reporting”)). If field data on actual occurrences of the habitat are not sufficient, modelling and extrapolation should be used whenever feasible[25]. The distribution map will be though composed of grids with both the actual (mapped) and presumed habitat occurrences.

The distribution map will consist of 10 x 10 km ETRS89 grid cells in the ETRS LAEA 5210 projection[26]. The gridded dataset will consist only of the 10 km grid cells where the habitat is recorded or estimated as occurring; the use of attribute data to indicate the presence or absence of a habitat in a grid cell is not permitted. The period over which the distribution data were collected should be included in the metadata, following the INSPIRE guidelines[27]. The technical specifications for distribution maps are given on the Reference Portal.

If more precise maps giving more detailed distribution of habitat are available, these can be submitted as additional maps.

For smaller countries, a 1 x 1 km grid (or 5 x 5 km) is allowed; these will then be aggregated to 10 x 10 km for visualisation at European level.

The grids for individual countries are available for download from the Reference Portal[28].

---

[25] If modelling or exceptionally expert opinion are used this should be noted in the field 2.3 Method used

[26] European Terrestrial Reference System 1989; Lambert Azimuthal Equal Area Latitude of origin 52N, Longitude of origin (central meridian) 10E. http://www.eionet.europa.eu/gis

[27] For the period 2013-2018 it is not obligatory or expected to provide the Resolution No. 8 (2012) spatial dataset compliant with INSPIRE requirements.

[28] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

2.3 Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. a dedicated mapping or survey or a robust predictive model with representative sample of occurrence data, calibration and satisfactory evaluation of its predictive performance using good data on environmental conditions across the range of the habitat);
b) based mainly on extrapolation from a limited amount of data (e.g. other predictive models or extrapolation using less complete sample of occurrence and environmental data);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

If the reported distribution map obtained as a result of comprehensive mapping, modelling or extrapolation or, exceptionally, expert interpretation covers less than 75 % of the presumed actual habitat distribution (i.e. the resulting map is incomplete in relation to the presumed habitat distribution), the “Method used” should be reported as “(d) Insufficient or no data available”.

2.4 Additional maps (optional)

Countries may also submit additional maps, for example giving more detailed distribution data (e.g. at higher resolution) or a range map (See Section “4 Range” (in “Definitions and methods for habitat reporting”)). Any additional maps must be accompanied by the relevant metadata and details of the projection used. Note that this is an optional field and does not replace the need to provide a map in field 2.2.

Maps at a resolution other than 10 x 10 km or with grids other than the ETRS89 LAEA 5210 grid, or close to 10 x 10 km, may be reported here.

BIOGEOGRAPHICAL LEVEL

3 Biogeographical and marine regions

The following section should be completed for each biogeographical or marine region in which the habitat occurs. So, for example, if a habitat occurs in three biogeographical regions within a country, three separate reports are required.

3.1 Biogeographical or marine region where the habitat occurs

Biogeographical region or marine region concerned within the Country.

- Use the following names for biogeographical regions:

Alpine	Boreal	Pannonian
Arctic	Continental	Steppic
Atlantic	Mediterranean	
Black Sea	Macaronesian	

- Use the following names for marine regions[29]:

Marine-Arctic	Marine Black Sea	Marine Macaronesian
Marine Atlantic	Marine Baltic Sea	Marine Mediterranean
Marine Caspian		

Maps and boundaries of biogeographical and marine regions[30] can be found on the Reference Portal[31].

More information on marine regions and on habitats which should be reported in marine regions can be found in Section “Marine habitats” (in “Definitions and methods for habitat reporting”).

3.2 Sources of information

For information from published sources related to Sections 4 to 6 (including the published sources related to distribution maps, on which the range calculation is based) and Sections 8 to 12, provide bibliographic references or links to an Internet site(s). Use the order: author, year, title of publication, source, volume, number of pages, web address.

All Internet addresses in the reporting fields should be given in full, including the initial “http://” or “https://”, if applicable.

4 Range

This section provides information on range surface area, range trends and favourable reference range.

Range is defined as “the outer limits of the overall area in which a habitat or species is found at present” and it can be considered as an envelope within which areas actually occupied occur.

[29] For the Reporting period 2013-2018, the habitat selection as available from the reference portal, does not contain marine habitats. This section on marine regions will not have to be used for the first reporting period.
[30] Maps for marine regions will be made available in the future on the Reference Portal
[31] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

The range should be calculated based on the map of the actual distribution using a standardised algorithm. A standardised process is needed to ensure repeatability of the range calculation in different reporting rounds.

It is not necessary to submit a map of the range but the area of the range and trend in area are required to assess this parameter. However, a map can be submitted in field 2.4 “Additional maps”.

Complementary information and methods for range calculation can be found in Section “4 Range” (in “Definitions and methods for habitat reporting”).

4.1 Surface area

This is the total surface area (in km²) of the current range (outer limits of the habitat distribution) within the biogeographical or marine region concerned. The range in the biogeographical or marine region concerned is represented by grids (10 x 10 km) which occur entirely or partly within the region (i.e. grids intersected by the boundaries of the biogeographical or marine regions are counted under both regions). In general, the surface area is provided in 10 x 10 km^2 resolution and the minimum area should be 100 km^2. For localised habitats with a very small range it is possible to report using finer resolution; for example, for habitats restricted to a single location, range is the area of locality where habitat occurs, which can be several square metres. Decimals are allowed, as the range of some habitats can be very small.

The method for estimating the surface area described in Section “Calculation of range” (in chapter “4 Range in part “Definitions and methods for habitat reporting”) is recommended.

4.2 Short-term trend period

Give the dates for the beginning and end of the period for which the trend has been reported. The short-term trend should be evaluated over a period of 12 years (two reporting cycles). For the 2013–2018 reports, this means the period is 2007–2018 or a period as close as possible to this. Thus, some flexibility is permitted, so that while trends would ideally be reported for 2007–2018, data from e.g. 2004–2015 will be accepted if the best available data relate to surveys in those years.

Further guidance is given in Section “Trends” (in “Definitions and methods for habitat reporting”).

4.3 Short-term trend direction

A trend is a (measure of a) directional change of a parameter over time. The range trend shows changes in the overall extent of distribution of the habitat. Although rare for range, a fluctuation (or oscillation) is not a directional change of a parameter, and therefore fluctuation is not a trend.

Indicate if range trend over the period reported in field 4.2 was:

stable / increasing / decreasing / uncertain / unknown

Report “uncertain” if some data are available but they are not enough to accurately determine direction. Use “unknown” where there are no data available.

The short-term trend information is used in the evaluation matrix to undertake the conservation status assessment. Any large-scale deviation from this should be explained in field 4.12 “Additional information”.

If there is an apparent change in direction of the trend resulting from a change in monitoring methodology or improved knowledge about habitat distribution, it should not be considered a trend. This apparent change should be indicated in field 4.11 “Change and reason for change in surface area of range”.

Further guidance is given in Section “Trends” (in “Definitions and methods for habitat reporting”).

4.4 Short-term trend magnitude (optional)

If possible quantify the percentage change over the period indicated in field 4.2. The range at the beginning of the reporting period is taken as 100 %. The figure can be presented as a precise figure (e.g. 27 %) or as a banded figure (e.g. 20–30 %). If providing a precise figure give the same value in the “minimum” and “maximum” fields.

4.5 Short-term trend – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. comparing two range maps based on accurate distribution data, or a dedicated monitoring of a habitat’s distribution with good statistical power);
b) based mainly on extrapolation from a limited amount of data (e.g. trends derived from occurrence data collected for other purposes, or from data collected from only a part of the geographical range of a habitat, or trends based on measuring some other predictors of habitat distribution, such as land-cover changes);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

4.6 Long-term trend period (optional)

The long-term trend should be evaluated over a period of 24 years (four reporting cycles). For the 2013–2018 reports this period is 1994–2018 or a period as close as possible to this. Indicate the period in this field. For the 2013–2018 reports this information and the associated fields 4.6 and 4.7 are optional.

Further guidance is given in “**Error! Reference source not found.**” (in “Definitions and methods for abitat reporting”).

For guidance in filling in fields **4.7 “Long-term trend direction”**, **4.8 “Long-term trend magnitude”** and **4.9 “Long-term trend – Method used”,** please see the guidance for fields 4.2 to 4.5 (short-term trends).

4.10 Favourable reference range

Favourable reference range is the range within which all significant ecological variations of the habitat are included for a given biogeographical region and which is sufficiently large to allow the long-term viability of the habitat. This information is needed to undertake the evaluation of conservation status according to Annex E. In many cases it is not possible to estimate a value for favourable reference range (option (a)) but it is clear that the favourable reference range is greater

(or much greater) than the present-day value. Using operators (option (b)) “greater than” (>) and “much greater than” (>>) is preferable to reporting a parameter as “unknown”.

The following information is requested:

a) area in km²; or
b) if operators (≈, >, >>) were used for the assessment, indicate here with the relevant symbol (≈ “approximately equal to”, > “more than”, >> “much more than”); or
c) if the favourable reference range is unknown, use “x” for the reference range; and
d) indicate the method used to set the reference value (free-text field).

The field “indicate method used” (d) is mandatory if (a) area is provided, but countries are encouraged to describe the method used also when (b) operators were used.

The use of operators should help to reduce the use of “unknown” to a minimum:

- if an operator (b) is used, then there is no need to insert a value in field 4.10(a) area in km²; operators indicate that the reference value is “approximately equal to”, “more than” or “much more than” the current value provided in field 4.1 “Surface area (of range)”;
- if the value is provided for area in km² (a)-no operator should be used.

Where the reference value has changed in comparison to the previous reporting period, this should be explained in field 4.12 “Additional Information”.

Favourable reference values and the use of operators are discussed in more detail in Section “Favourable reference value” (in “Definitions and methods for habitat reporting”).

4.11 Change and reason for change in surface area of range

As the reporting period 2013-2018 is the first period, there is no need to fill in this section from the previous reporting period. Although an indication of change might be given in field 4.12 “Additional information”

This field is used to indicate if there is any change since the previous reporting period (2007–2012) in the range surface area reported and, if so, to describe the nature of this change.

First answer the question: “Is there a change between reporting periods?” (i.e. is area of range different from the last reporting period)? YES/NO.

If the answer is “Yes”, indicate which of the following options apply (it is possible to reply “Yes” to more than one of the options a–c, but at least one option “Yes” must be selected for options a–d)[32]:

a) yes, due to genuine change;

[32] In some cases the actual value reported for range surface area has increased, reflecting both a genuine increase in range (positive range trend) and better knowledge or data. Both options (“genuine change” and “improved knowledge or more accurate data”) above should be selected. In other situations the actual value reported for range surface area has increased since the previous period due to better knowledge or data. Nevertheless, it may still be clear that the habitat range is actually declining, based on analyses of data from sites. The option “improved knowledge or more accurate data” above should be selected. Field 4.12 “Additional information” allows a country to provide further details on why a range estimate has increased, even though a range decline is reported.

b) yes, due to improved knowledge or more accurate data;
c) yes, due to the use of a different method (including use of different thresholds);
d) yes, but there is no information on the nature of change.

Finally, indicate whether any difference is mainly due to (select one of the options):

- genuine change;
- improved knowledge or more accurate data;
- the use of a different method.

If a country wishes to give further information (e.g. cases where range surface area does not change, but its borders are shifting), this can be done in field 4.12 “Additional information”.

4.12 Additional information (optional)

Additional information to help understand the information given on range can be reported here (for example, details on the use of old distribution data, use of data from the previous reporting period, use of different gap distance or range calculation method than that recommended).

5 Area covered by habitat

This section reports on the area covered by the habitat type within the range in the biogeographical or marine region concerned.

5.1 Year or period

Enter the year (e.g. 2015) or period (e.g. 2013–2017) when the surface area of the habitat was determined.

Many reports will involve periods, because habitat mapping usually involves several years of fieldwork and may extend beyond the limits of the current reporting period (2013–2018). The year or period reported should cover the actual period during which the data were collected.

In some cases the area covered by habitat will be estimated based on a comprehensive habitat mapping which took place during the previous reporting period or even before and that has been updated with the results of regular monitoring. The year or period reported should be that which the reported estimate of the area covered by habitat relates to.

More detailed information on year or period of data used for the area covered by habitat can be provided in field 5.15 “Additional information”.

5.2 Surface area

This refers to the total area (in km^2) currently occupied by the habitat within the biogeographical or marine region of the country concerned. For overlapping habitats see “**Error! Reference source not ound.**” (in “Definitions and methods for habitat reporting”).

The surface area of habitat can be reported as an interval (for example minimum and maximum value or 95 % confidence interval from a model) and/or as a best available single value. The interval surface area estimate (fields 5.2(a) and (b)) should be given as minimum and maximum numbers. Minimum and maximum should always be entered together, i.e. not as only the minimum /only the maximum.

There is also a “best single value” field (5.2 (c)) where a single value (a precise value or an estimate) can be entered. When only a minimum (or maximum) value of the surface area of the habitat is known (e.g. through expert opinion) this should be entered in the “Best single value” field and NOT the “(a) Minimum” or “(b) Maximum” fields. The source of this estimate can then be clarified in field 5.3 (see below). The numbers reported should not be rounded.

Both interval and a best single value can be provided together, for example where the interval coming from modelling is quite large (e.g. minimum and maximum values) and an expert evaluation of the actual surface area of habitat is also available. The expert evaluation of modelling results can result in a more accurate single value to be used in the European assessments. In other situations, the point estimate (best single value) is available and the country wishes to provide the confidence limits. The confidence interval can be entered in the minimum and maximum fields. If both, interval and best single values are provided this should be explained in field 5.15 “Additional information”.

5.3 Type of estimate

The type of estimate for the reported interval in fields 5.2(a) and (b) or the best single value in field 5.2(c) should be outlined here. The options for reporting this are:

- best estimate – the best available single figure (including where only the maximum value of the area covered by habitat is available) or interval, derived from e.g. a survey or a model, a compilation of figures from localities or expert opinion, but for which 95 % confidence limits could not be calculated. Whether a best estimate comes from the monitoring data, modelling or from an expert opinion should be assessed in field 5.4;
- 95 % confidence interval – estimates derived from sample surveys or a model in which 95 % confidence interval could be calculated;
- minimum – where insufficient data exist to provide even a loosely bounded population size estimate, but where a population size is known to be above certain value, or where the reported interval comes from a sample survey or monitoring project which probably underestimates the real population size.

If both interval (field 5.2(a) “Minimum” and field 5.2(b) “Maximum”) and a single value (field 5.2(c) “Best single value”) are provided, field 5.3 “Type of estimate” should correspond to the more accurate estimate. This should be noted in field 5.15 “Additional information”.

5.4 Surface area – Method used

This field is used to detail the methodology used for calculating habitat area in field 5.2. Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. complete habitat mapping or data from previous habitat mapping updated with robust monitoring data on trends);
b) based mainly on extrapolation from a limited amount of data (e.g. using modelling or extrapolation from surveys of parts of the habitat distribution; using data from previous complete habitat mapping updated with good trend data);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

If both interval (field 5.2(a) “Minimum” and field 5.2(b) “Maximum”) and a single value (field 5.2(c) “Best single value”) are provided, field 5.4 “Method used” should correspond to the more accurate estimate. This should be noted in field 5.15 “Additional information”.

5.5 Short-term trend period

Give the dates of the beginning and end of the period for which the trend has been reported. The short-term trend should be evaluated over a period of 12 years (two reporting cycles). For the 2013–2018 reports, this means the period is 2007–2018 or a period as close as possible to this. Thus, some flexibility is permitted, so that while trends would ideally be reported for 2007–2018, data from e.g. 2004–2015 will be accepted if the best available data relate to surveys in those years.

Further guidance is given in Section “Trends” (in “Definitions and methods for habitat reporting”).

The short-term trend should be used for the assessment. Any large-scale deviation from this should be explained under field 5.15 “Additional information”.

5.6 Short-term trend direction

A trend is a (measure of a) directional change of a parameter over time. The trend in area covered by habitat shows changes in the overall area covered by the habitat. Although rare for habitat area, the fluctuation (or oscillation) is not a directional change of a parameter, and therefore fluctuation is not a trend.

Indicate if the habitat trend over the reported period in field 5.4 was:

stable / increasing / decreasing / uncertain / unknown

Report “uncertain” if some data are available but they are not enough to accurately determine direction. Use “unknown” where there are no data available.

The short-term trend information is used in the evaluation matrix to assess the conservation status. Any large-scale deviation from this should be explained in field 5.15 “Additional information”.

If there is an apparent change in direction of the trend resulting from a change in monitoring methodology or improved knowledge about the habitat distribution, it should not be considered a trend. This apparent change should be indicated in field 5.14 “Change and reason for change in surface area”.

Further guidance is given in Section “Trends” (in “Definitions and methods for habitat reporting”).

5.7 Short-term trend magnitude (optional)

If possible, quantify the percentage change (with range at the beginning of the reporting period as 100 %) over the period reported in field 5.4. It can be given as a precise figure (e.g. 27 %) or a banded range (e.g. 20–30 %). If a precise figure is available give the same value under “minimum” and “maximum” (fields 5.6(a) and (b)). Where a statistically robust method has been used (see field 5.7) please provide the confidence interval (e.g. 95 %) in field 5.6(c) with the upper and lower confidence interval limits in fields 5.6(a) and 5.6(b) respectively.

5.8 Short-term trend – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. a dedicated monitoring of a habitat area with good statistical power);
b) based mainly on extrapolation from a limited amount of data (e.g. trends derived from data collected from a limited number of sample sites; trends extrapolated from data collected for other purposes; trends extrapolated from some other indirect measurements, such as land-cover changes);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

5.9 Long-term trend period (optional)

The long-term trend should be evaluated over a period of 24 years (four reporting cycles). For the 2013–2018 reports, this means the period is 1994–2018 or a period as close as possible to this. Indicate the period in this field. For the 2013–2018 reports, this information, together with fields 5.10 to 5.12, are optional.

Further guidance is given in Section “Trends” (in “Definitions and methods for habitat reporting”).

For guidance in filling in field **5.10 “Long-term trend direction”**, field **5.11 “Long-term trend magnitude”** and field **5.12 “Long-term trend – Method used”**, see fields 5.6 to 5.8 (short-term trends).

5.13 Favourable reference area

Favourable reference area is the surface area in a given biogeographical region considered the minimum necessary to ensure the long-term viability of the habitat type; this should include necessary areas for restoration or development for those habitat types for which the present coverage is not sufficient to ensure long-term viability. This information is needed to undertake the evaluation of conservation status using the evaluation matrix (Annex C). In many cases it is not possible to estimate a value for favourable reference area (option (a)) but it is clear that the favourable reference area is greater (or much greater or, in exceptional situations, lower) than the present-day value. Using operators (option (b)) “greater than” (>), “much greater than” (>>) or “lower than” (<) is preferable to reporting a parameter as “unknown”.

The following information is requested:

a) area in km²;
b) if operators (≈, >, >>, <) were used for the assessment, indicate here with the relevant symbol (≈ “approximately equal to”, > “more than”, >> “much more than”, < “less than”);
c) if there are no data on the area covered by the habitat, use “x” for the reference area;
d) indicate the method used to set the reference value (free-text field).

The field “indicate method used” (d) is mandatory if (a) area is provided, but countries are encouraged to describe the method used also when (b) operators were used.

If an operator is used to estimate a favourable reference area, it should be compared with the minimum estimate of surface area given in field 5.2.

The use of (b) operators should help to reduce the use of "unknown" to a minimum:

- if an operator (b) is used, then there is no need to insert a value in field 5.13(a) area in km²; operators indicate that the reference value is "approximately equal to", "more than", "much more than" or "less than" the current value provided in field 5.2 "Surface area (area covered by habitat)";
- if the value is provided for area in km² (a) no operator should be used.

Where the reference value has changed in comparison to the previous reporting period, the reason for this should be explained in field 5.15 "Additional information".

Favourable reference values and the use of operators are discussed more in detail in "Favourable reference value" (in "Definitions and methods for habitat reporting").

5.14 Change and reason for change in surface area

As the reporting period 2013-2018 is the first period, there is no need to fill in this section from the previous reporting period. Although an indication of change might be given in field 5.15 "Additional information"

This field is used to indicate if there is any change since the previous reporting period (2007–2012) in the area covered by habitat reported and, if so, to describe the nature of this change.

First answer the question: "Is there a change between reporting periods?" (i.e. is the area covered by habitats different from the last reporting period?) YES/NO.

If the answer is "Yes", indicate which of the following options apply (it is possible to reply "Yes" to more than one of the options a–c, but at least one option "Yes" must be selected for options a–d)[33]:

a) yes, due to genuine change;
b) yes, due to improved knowledge or more accurate data;
c) yes, due to the use of a different method (including use of different thresholds);
d) yes, but there is no information on the nature of change.

Finally, indicate whether any difference is mainly due to (select one option):

- genuine change;
- improved knowledge or more accurate data;
- the use of a different method.

[33] In some cases the actual value reported for area covered by habitat has increased, reflecting both a genuine increase in area (positive trend) and better knowledge or data. Both options ("genuine change" and "improved knowledge or more accurate data") above should be selected. In other situations the actual value reported for area covered by habitat has increased since the previous period due to better knowledge or data. Nevertheless, it may still be clear that the habitat area is actually declining, based on analyses of data from sites. The option "improved knowledge or more accurate data" above should be selected. Field 5.15 "Additional information" allows a country to provide further details on why an area estimate has increased, even though an area decline is reported.

If a country wishes to give further information, this can be done in field 5.15 “Additional information”.

5.15 Additional information (optional)

Additional information to help understand the information given on habitat area can be reported here as free text (for example, information on the need to reflect fragmentation in setting favourable reference area).

6 Structure and functions

This section provides information on the proportion of the habitat area in “good” and “not-good” condition, its trends, and typical species. Habitat structure is considered to be the physical components of a habitat which will more than likely be formed by species both living and dead, but can also include abiotic features.

Complementary information on structure and functions of habitat can be found in Section “6 Structure and functions (including typical species)” (in “Definitions and methods for habitat reporting”).

6.1 Condition of habitat

Provide the area (km²) of habitat with “good”, “not-good” and “unknown” condition. The condition of the habitat at the biogeographical level is reported as:

a) area in good condition;
b) area in not-good condition;
c) area where condition is not known.

The area is reported in km² and can be reported as a range (minimum and maximum); if a precise value is known this value should be reported for both the “minimum” and “maximum” fields.

Further information on estimating habitat area in “good”/”not good” condition can be found in Section “Condition of habitat type” (in chapter “6 Structure and functions (including typical species)” in part “Definitions and methods for habitat reporting”).

6.2 Condition of habitat – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. complete habitat mapping including information on habitat conditions, or complete habitat mapping combined with robust extrapolation of habitat conditions or previous complete inventory updated with information from robust monitoring);
b) based mainly on extrapolation from a limited amount of data (e.g. using modelling or extrapolation from detailed surveys of parts of the habitat distribution);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

6.3 Short-term trend of habitat area in good condition – Period

Give the dates of the beginning and end of the period for which the trend has been reported. The short-term trend should be evaluated over a period of 12 years (two reporting cycles). For the 2013–2018 reports, this means the period is 2007–2018 or a period as close as possible to this. Thus, some flexibility is permitted, so that while trends would ideally be reported for 2007–2018, data from e.g. 2004–2015 will be accepted if the best available data relate to surveys in those years.

Further guidance is given in Section “Trends” (in “Definitions and methods for habitat reporting”).

6.4 Short-term trend of habitat area in good condition – Direction

A trend is a (measure of a) directional change of a parameter over time. The trend of habitat area in good condition should inform on changes in proportions between the habitat areas in good and not-good condition. Although rare in the case of range of habitat area, fluctuation (or oscillation) is not a directional change of a parameter, and therefore fluctuation is not a trend.

Indicate if the habitat trend over the reported period in field 6.3 was:

stable / increasing / decreasing / uncertain / unknown

Report “uncertain” if some data were available but they were not enough to accurately determine direction. Use “unknown” where there are no data available.

The short-term trend information is used in the evaluation matrix to assess the conservation status. Any large-scale deviation from this should be explained in field 6.8 “Additional information”.

If there is an apparent change in direction of the trend resulting from a change in monitoring methodology or improved knowledge about the habitat condition, it should **not** be considered a trend. An apparent change should be indicated in field 6.8 “Additional information”, and the trend should be reported as “unknown”, unless other information also clearly shows a trend.

6.5 Short-term trend of habitat area in good condition – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. dedicated monitoring of a habitat’s condition with good statistical power);
b) based mainly on extrapolation from a limited amount of data (e.g. trends derived from data collected from a limited number of sample sites; trends extrapolated from data collected for other purposes; trends extrapolated from some other indirect measurements, such as shrub coverage);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

6.6 Typical species

The typical species of the habitat are reported as they are used to assess whether a habitat is at favourable conservation status. These are species which occur regularly in the habitat type (as opposed to occasionally occurring species) and are species which are good indicators of favourable habitat quality. The list of "typical species" chosen for the purpose of assessing conservation status should ideally remain stable over the medium to long term, i.e. across reporting periods. Typical species may be drawn from any species group. The choice of species should not be restricted to the species listed in Resolution No. 6 (1998).

Indicate if the list of typical species has changed since the previous reporting period (Yes or No).

If the list of "typical species" has changed, then an additional spreadsheet with an updated list is requested. The spreadsheet should follow the specifications provided on the Reference Portal[34]. Only Latin names should be used. It is recommended to use names from the Pan-European Species directories Infrastructure (PESI[35]) Catalogue of Life (CoL[36]), Eur+Med PlantBase[37], or another international or regional taxonomical reference.

An extensive definition of typical species (and structure and functions) can be found in Section "Typical species" (in chapter "6 Structure and functions (including typical species)" in part "Definitions and methods for habitat reporting").

6.7 Typical species – Method used (optional)

This field allows for changes in the methodology for recording typical species to be noted.

If "No" was chosen in field 6.6, there is no requirement to complete field 6.7.

6.8 Additional information (optional)

Additional information can be provided as free text to help understand the information given on the condition of the habitat or typical species.

7 Main pressures and threats

This section provides information on main pressures and threats. A list of pressures and/or threats should be provided and for each pressure/threat a ranking of its impact on the conservation status of habitat is also required.

Pressures have acted within the current reporting period and they have an impact on the long-term viability of the habitat and its typical species; threats are future/foreseeable impacts (within the next two reporting periods) that are likely to affect the long-term viability of the habitat and its typical species (see Table 9). The threats should not cover theoretical threats, but rather those issues judged to be reasonably likely. This may include continuation of pressures

[34] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal
[35] http://www.eu-nomen.eu/
[36] http://www.catalogueoflife.org/
[37] http://www.emplantbase.org/home.html

Table 9: Definition of pressure and threat (in the context of reporting under Resolution No. 8 (2012))

	Period of action/definition	Time-frame
Pressure	Acting now and/or during (any part of or all of) the current reporting period.	Current six-year reporting period.
Threat	Factors expected to act in the future after the current reporting period.	Future two reporting periods, i.e. within 12 years following the end of the current reporting period.

7.1 Characterisation of pressures/threats

Provide the list of pressures and/or threats and a ranking of their impact: list a maximum of 10 pressures and a maximum of 10 threats. Only pressures/threats of high ("H") and of medium ("M") importance, as defined in Table 10, should be reported.

For each habitat:

a) Select from the list of pressures/threats, a maximum of 10 entries for each of pressures and threats using the code at the second level of the hierarchical list. The list of pressures and threats is available on the Reference Portal[38].

b) For each pressure and threat, indicate its ranking, i.e. "H" for High, "M" for Medium, under both "Pressure" and "Threat". For example, if a factor selected from the list represents both a pressure and a threat, "H" or "M" should be reported under both headings as appropriate. If it represents a pressure but not a threat, "H" or "M" should be reported under "Pressure" and "Threat" should be left blank. A maximum of five high-level pressures and five high-level threats should be noted. This will make it possible to identify the most important factors at a European scale.

Table 10: Definition of High and Medium ranked pressures/threats

Code	Meaning	Comment
H	High importance/impact	Important direct or immediate influence and/or acting over large areas (a pressure is the major cause or one of the major causes, if acting in combination with other pressures, of significant decline of surface area of habitat, range or area of habitat with good conditions; or pressure acting over large areas preventing the habitat from being restored to favourable conservation status at the biogeographical scale).
M	Medium importance/impact	Medium direct or immediate influence, mainly indirect influence and/or acting over moderate part of the area/acting only regionally (other pressure not directly or immediately causing significant declines).

The impact of the pressure should reflect the influence of a pressure or threat on conservation status of the habitat. Only pressures having important direct or immediate influence on one or several parameters of conservation status at the biogeographical scale (causing significant decline or

[38] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

deterioration or preventing habitat from reaching favourable status, see Table 10) should be ranked as "high". However, it is likely that habitats with favourable conservation status or where only very localised or slight declines were recorded will not have high importance pressures (unless the pressures are counteracted with measures). The maximum number of "high" ranked pressures and/or threats that can be reported is five, even if more could be considered. This, together with any other information related to pressures and threats, can be noted in field 7.3 "Additional information"

Table 11 provides an example of pressures and threats characterisation using a maximum of five pressures of High importance.

Table 11: An example of pressures and threats characterisation

Characterisation of pressures/threats		
a) Pressure/threat *List a maximum of 10 pressures and a maximum of 10 threats using the code list provided on the Reference Portal*	**b) Ranking of pressure/threat** *Indicate whether the pressure/threat is of:* *H = high importance (maximum 5 entries for pressures and 5 entries for threats)* *M = medium importance*	
	Pressure	**Threat**
A14 Application of synthetic fertilisers	H	H
A22 Active abstractions from groundwater, surface water or mixed water for agriculture	M	-
B05 Clear-cutting, removal of all trees	H	M
D01 Roads, paths railroads and related infrastructure (e.g. bridges, viaducts, tunnels)	H	H
D05 Electricity and communication infrastructure (e.g. phone lines, masts and antennas)	H	M
E01 Conversion from other land uses to housing and settlement areas (excl. drainage)	M	H
I02 Problematic native plants and animals	H	H
K04 Natural processes of eutrophication or acidification	-	M

Note that the example is only illustrative since it uses draft codes that may not be retained as such in the final list of pressures and threats.

Habitats can be affected by pressures and threats originating from outside the country (e.g. pollution or nitrogen deposition). The list of pressures and threats has codes for transboundary effect of pressures and threats: "XO threats and pressures from outside the country" and "XE threats and pressures from outside the EU and Emerald countries' territory".

More detailed guidance on reporting pressure/threats is provided in Section "7 Main pressures and threats" (in "Definitions and methods for habitat reporting") and in the notes in the list of pressures and threats available from the Reference Portal.

7.2 Sources of information (optional)

Provide sources of information relevant to Section 7 (optional) with URL, metadata, or supporting evidence for the highest ranking pressures only (i.e. High importance).

7.3 Additional information (optional)

This is an optional field to provide any additional information on the nature of a certain pressure/threat.

8 Conservation measures

This section concerns information on conservation measures, including management plans, taken to maintain or to restore the habitats at Favourable conservation status. The section contains a list of measures and their evaluation. The evaluation is an overall assessment and not a measure-by-measure evaluation.

8.1 Status of measures

Select whether measures are needed or not. If the answer is “Yes, measures are needed”, then proceed to answer the following three questions:

a) measures identified but none yet taken? (YES/NO); or
b) measures identified and taken? (YES/NO); or
c) measures needed but cannot be identified? (YES/NO).

Measures may be implemented at different points in time. Choose option (a) if the majority of the most important measures identified have not yet been taken, choose option (b) if the majority of the most important measures have already been or are being implemented.

8.2 Main purpose of the measures taken

Indicate the main purpose of the measures taken. This part should only be filled in if the conservation measures have been taken (field 8.1(b) “Measures identified and taken” is marked “Yes”). Even if several purposes can be identified, please indicate only the main one in terms of implementing the measures:

a) maintain the current range, surface area or structure and functions of the habitat type;
b) expand the current range of the habitat type (related to “Range”);
c) increase the surface area of the habitat type (related to “Area covered by habitat”);
d) restore the structure and functions, including the status of typical species (related to “Specific structure and functions”).

8.3 Location of the measures taken

Indicate where the measures are mostly being implemented. This part should only be filled in if the conservation measures have been taken (field 8.1(b) “Measures identified and taken” is marked “Yes”):

a) only inside the Emerald Network;
b) both inside and outside Emerald Network;
c) only outside Emerald Network.

This field tries to capture where the main focus of the conservation action is taking place. Therefore, choose option (a) if all, or the vast majority, of the conservation measures are restricted to the Emerald Network, option (b) if there is a proportional investment in the implementation of measures inside and outside the Emerald Network, and option (c) if all, or the vast majority, of the measures are taken outside the Emerald Network.

8.4 Response to the measures

Provide an estimate of when the measures taken will start, or are expected to start, to neutralise the pressure and to produce positive effects (with regard to the main purpose of the measures indicated in field 8.2). Choose one option from:

a) short-term results (within the current reporting period, 2013–2018);
b) medium-term results (within the next two reporting periods, 2019–2030);
c) long-term results (after 2030).

8.5 List of main conservation measures

List a maximum of 10 conservation measures using the code that is provided on the Reference Portal[39].

More detailed guidance on the use of conservation measures is provided in Section "8 Conservation measures" (in "Definitions and methods for habitat reporting") and in the notes in the list of conservation measures available from the Reference Portal.

8.6 Additional information (optional)

Additional information to help understand the information given on conservation measures can be reported here.

9 Future Prospects

This section provides information on the future prospects of three parameters (Range, Area, and Structure and functions). Future prospects indicate the direction of expected change in conservation status in the near future based on a consideration of the current status, reported pressures and threats, and measures being taken for each of the other three parameters (Range, Area, and Structure and functions).

9.1 Future prospects of parameters

For each parameter (Range, Area, and Structure and functions), indicate if the prospects are "good", "poor", "bad" or "unknown". Future prospects of each of the three parameters should principally reflect the future trends which are the result of the balance between threats and conservation measures. The future prospects should be assessed in relation to the current conservation status. For example, the impact of future improvement on the assessment of future prospects of a parameter will be different if the current status is "favourable" or "unfavourable-bad".

An evaluation method is provided in Section "Assessing future prospects" (in chapter"9 Future prospects" in part "Definitions and methods for habitat reporting").

[39] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

9.2 Additional information (optional)

Additional information to help understand how future prospects were assessed can be reported here.

10 Conclusions

This section includes the assessment of conservation status at the end of the reporting period in the concerned biogeographical region or marine region. It is derived from the matrix in Annex E.

Give the result of the assessment for each parameter of conservation status using the four categories available: “favourable” (FV), “unfavourable-inadequate” (U1), “unfavourable-bad” (U2) and “unknown” (XX).

The conservation status of parameters is assessed using the criteria in the evaluation matrix (Annex E of the Report format). Sections 10.1 to 10.5 provide an overview of the assessment criteria for each of the parameters. In addition, several complementary assumptions and criteria are outlined in these guidelines, which aim at harmonising and facilitating the assessment of conservation status. For each parameter these complementary assumptions and criteria are summarised under the heading “Complementary remarks”.

10.1 Range

Give the result of the assessment of the status for Range using the four categories available: “favourable” (FV), “unfavourable-inadequate” (U1), “unfavourable-bad” (U2) and “unknown” (XX).

Conservation status	Assessment criteria
Favourable (FV)	According to the evaluation matrix (Annex E) the status of Range is “favourable” if: • the trend is stable (loss and expansion in balance) or increasing; and • range surface area (field 4.1) is not smaller than the favourable reference range (field 4.10). Complementary remarks: The trend over the short-term trend period (field 4.2) should be used for the status assessment.
Unfavourable-inadequate (U1)	According to the evaluation matrix (Annex E) the status of Range is “unfavourable-inadequate” if: • any other combination (other combination of criteria than for “favourable” or “unfavourable-bad”). Complementary remarks: 1. The evaluation matrix does not include explicit criteria for “unfavourable-inadequate” status of Range. However, taking into account the criteria for “favourable” and “unfavourable-bad”, the status of Range should be considered as “unfavourable-inadequate” if: • a decline equivalent to a loss of less than 1 % per year; or • range surface area (field 4.1) is less than 10 % below favourable reference range (field 4.10).

	2. The trend over the short-term trend period (field 4.2) should be used for the status assessment.
Unfavourable-bad (U2)	According to the evaluation matrix (Annex E) the status of Range is "unfavourable-bad" if: • a large decline equivalent to a loss of more than 1 % per year within the period specified by the Country; or • range surface area (field 4.1) is more than 10 % below favourable reference range (field 4.10). Complementary remarks: The trend over the short-term trend period (field 4.2) should be used for the status assessment.
Unknown (XX)	According to the evaluation matrix (Annex E) the status of Range is "unknown" if: • there is no or insufficient reliable information available.

10.2 Area

Give the result of the assessment of the status for Area covered by the habitat using the four categories available: "favourable" (FV), "unfavourable-inadequate" (U1), "unfavourable-bad" (U2) and "unknown" (XX).

Conservation status	**Assessment criteria**
Favourable (FV)	According to the evaluation matrix (Annex E) the status of Area covered by habitat is "favourable" if: • the trend is stable (loss and expansion in balance) or increasing; and • area covered by habitat (field 5.2) is not smaller than the favourable reference area (field 5.13); and • there are no significant changes in distribution pattern within the range. Complementary remarks: 1. The trend over the short-term trend period (field 5.5) should be used for the status assessment. 2. There may be situations where the habitat area has decreased during the short-term trend period (field 5.5) as a result of management measures (e.g. to restore another Resolution No. 4 (1996) on habitats or the habitat of a species listed in Resolution No. 6 (1998)). The habitat area could still be considered at favourable conservation status, but in such cases give details in field 10.8 "Additional information". 3. For dynamic habitats such as shifting coastal dunes (B1.3) the habitat area may have decreased during the short-term trend period (field 5.5), but due to the dynamic nature of the habitat this does not represent a permanent loss of the habitat area. In this situation the habitat area could still be assessed as "favourable" but details should be given in field 10.8.

Unfavourable-inadequate (U1)	According to the evaluation matrix (Annex E) the status of Area covered by habitat is "unfavourable-inadequate" if: • any other combination (other combination of criteria than for "favourable" or "unfavourable-bad"). Complementary remarks: 1. The evaluation matrix does not include explicit criteria for "unfavourable-inadequate" status of area covered by habitat. However, taking into account the criteria for "favourable" and "unfavourable-bad" the status of area covered by habitat should be considered as "unfavourable-inadequate" if: • a decline equivalent to a loss of less than 1 % per year; or • area covered by habitat (field 5.2) is less than 10 % below favourable reference area (field 5.13); or • small losses in distribution pattern within range. 2. The trend over the short-term trend period (field 5.5) should be used for the status assessment.
Unfavourable-bad (U2)	According to the evaluation matrix (Annex E) the status of area covered by habitat is "unfavourable-bad" if: • a large decrease equivalent to a loss of more than 1 % per year within the period specified by the Country; or • major losses in distribution pattern within range; or • area covered by habitat (field 5.2) is more than 10 % below favourable reference area (field 5.13) Complementary remarks: The trend over the short-term trend period (field 5.5) should be used for the status assessment.
Unknown (XX)	According to the evaluation matrix (Annex E) the status of Area covered by habitat is "unknown" if: • there is no or insufficient reliable information available.

10.3 Specific structure and functions (including typical species)

Give the result of the assessment of the status for Structure and functions using the four categories available: "favourable" (FV), "unfavourable-inadequate" (U1), "unfavourable-bad" (U2) and "unknown" (XX).

Conservation status	**Assessment criteria**
Favourable (FV)	According to the evaluation matrix (Annex E) the status of structure and functions is "favourable" if: • structure and functions (including typical species) are in good condition; and • and there are no significant deteriorations/pressures.

	Complementary remarks: 1. The evaluation matrix states that if more than 25 % of the habitat type area in the region being assessed is considered “unfavourable” (i.e. not in good condition), then the status of structure and functions is “unfavourable-bad”. However, it does not give numerical criteria for “favourable” or “unfavourable-inadequate”. It appears that in previous EU reports countries have used very different thresholds of the proportion of habitat area that must be in good condition to justify assessing structure and functions as “favourable”. Ideally, the entire area of a habitat type should be in good condition for structure and functions to be considered “favourable”. However, this is hardly achievable in practice and it could be acceptable to have part of the habitat type in “not-good” condition, but still consider structure and functions to be assessed as “favourable”. It is recommended to use an indicative value of 90 % of the habitat type area (field 6.1) in “good” condition as the threshold to conclude on “favourable” structure and functions. If a country uses a different value, this should be noted and explained in field 10.8 “Additional information”. This indicative value could, for example, be adapted according to the rarity/abundance of the habitat type (for more guidance see Section “Condition of habitat type” (in chapter “6 Structure and functions (including typical species)” in part “Definitions and methods for habitat reporting”). 2. Although it is not stated clearly in the evaluation matrix, the trend (trend in area in good condition (field 6.4)) must be stable or increasing for structure and functions to be considered “favourable”. 3. Although a full assessment of the conservation status of each typical species is not required, the typical species overall should be “favourable” (not threatened), at least in this habitat, as species can be typical of more than one habitat. 4. For a habitat to be considered “favourable”, fragmentation or other conditions are not impacting significantly on ecological processes. 5. It is possible that restoration has increased the area of habitat, but has decreased the proportion of habitat in “not good” condition, as the restored area is not yet in “good” condition. In such cases, if the area in ‘good’ condition is less than 90 % of the habitat area, the habitat should not be “favourable” for the parameter structure and functions (see above, point 1). Such cases are most likely to arise where the habitat area is lower than the reference value and the overall conservation status would have been “unfavourable” regardless of structure and functions.
Unfavourable-inadequate (U1)	According to the evaluation matrix (Annex E) the status of structure and functions is “unfavourable-inadequate” if: • any other combination (other combination of criteria than for “favourable” or “unfavourable-bad”). Complementary remarks: 1. The evaluation matrix does not include explicit criteria for “unfavourable-inadequate” status of structure and functions. However, taking into account the criteria for “favourable” and “unfavourable-bad” and complementary criteria for “favourable” status, the status of structure and functions should be considered as “unfavourable-inadequate” if: • the area of habitat with “unfavourable” (“not good”) condition (field 6.1) is less than 25 %; and

	• the area of habitat with "good" condition (field 6.1) is less than 90 %; and • the area of habitat with "unknown" condition (field 6.1) is less than 75 %.
Unfavourable-bad (U2)	According to the evaluation matrix (Annex E) the status of structure and functions is "unfavourable-bad" if: • more than 25 % of the area is unfavourable ("not good" in field 6.1) as regards its specific structure and functions (including typical species).
Unknown (XX)	According to the evaluation matrix (Annex E) the status of structure and functions is "unknown" if: • there is no or insufficient reliable information available. Complementary remarks: The status of structure and functions should be considered "unknown" if more than 75 % of habitat area has "unknown" condition (field 6.1).

10.4 Future prospects

Give the result of the assessment of the status of future prospects using the four categories available: "favourable" (FV), "unfavourable-inadequate" (U1), "unfavourable-bad" (U2) and "unknown" (XX).

Conservation status	**Assessment criteria**
Favourable (FV)	According to the evaluation matrix (Annex E) the status of future prospects is "favourable" if: • no significant impact from threats to habitat is expected and its long-term viability is assured. Complementary remarks: The future prospects should be assessed as "favourable" if all parameters have good prospects (field 9.1), or the prospects of one parameter are "unknown" while the other parameters have good prospects. The matrix for combining the prospects of three parameters to give overall status of future prospects is provided in Table 33: Combining the evaluation of the three parameters to give future prospects for a habitat type in Section "9 Future prospects" (in "Definitions and methods for habitat reporting").
Unfavourable-inadequate (U1)	According to the evaluation matrix (Annex E) the status of future prospects is "unfavourable-inadequate" if: • any other combination (other combination of criteria than for "favourable" or "unfavourable-bad"). Complementary remarks: The evaluation matrix does not include explicit criteria for "unfavourable-inadequate" status of Future prospects. However, taking into account the method for assessing the future prospects proposed in these guidelines, the status should be considered "unfavourable-inadequate" if the prospects of one or more parameters (field 9.1) are "poor", none has "bad" prospects and there is at most one parameter with "unknown" prospects.

Unfavourable-bad (U2)	According to the evaluation matrix (Annex E) the status of future prospects is "unfavourable-bad" if: • severe impacts from pressures and threats to the habitat are expected, prospects for its future are "bad" and long-term viability is not assured. Complementary remarks: The future prospects should be assessed as "unfavourable-bad" if one or more parameters have "bad" prospects (field 9.1).
Unknown (XX)	According to the evaluation matrix (Annex E) the status of future prospects is "unknown" if: • there is no or insufficient reliable information available. Complementary remarks: The future prospects should be assessed as "unknown" if two or more parameters have "unknown" prospects and no parameters have "bad" prospects (field 9.1).

10.5 Overall assessment of conservation status

Give the result of the overall assessment of conservation status using the four categories available: "favourable", "unfavourable-inadequate", "unfavourable-bad" and "unknown", based on the evaluation matrix for assessing conservation status for a habitat.

Status of parameters	All "favourable", or three "favourable" and one "unknown"	One or more "inadequate", but no "bad"	One or more "bad"	Two or more "unknown" combined with "favourable" or all "unknown"
Overall assessment of CS	"favourable"	"unfavourable-inadequate"	"unfavourable "bad"	"unknown"

10.6 Overall trend in conservation status

If the overall conservation status reported in field 10.5 is "favourable", "inadequate" or "bad", indicate the trend (qualifier) as follows:

improving / deteriorating / stable / unknown

The qualifier should be based on trends (for Range, Area covered by habitat, and Structure and functions) over the reporting period (2013–2018). As the trends over the reporting period are often not available, reported short-term trends can be used to assess the trend in the conservation status, unless there is evidence that the trend during the reporting period is different than a measured short-term trend (e.g. if after past decline of habitat over the reporting period 2007–2012 the trend has stabilised, the qualifier should be assessed as "stable" even though the trend in habitat area is "decreasing"; this should be explained in field 10.8 "Additional information"). The (short-term) trends should be combined using Table 12 below.

Table 12: Assessing overall trend in conservation status of a habitat by combining trends for parameters

Short-term trend of parameters (Range, Area of habitat, Structure and functions				Overall trend in CS
Number increasing	Number stable	Number decreasing	Number unknown	
3	0	0	0	Improving
2	1	0	0	
1	2	0	0	*(Only increasing and stable trends)*
0	3	0	0	Stable
2	0	1	0	
2	0	0	1	*(Only stable trends or stable and increasing dominates (there is at least one increasing and only one unknown or decreasing))*
1	1	1*	0	
1	1	0	1	** Trend magnitude should also be considered. The overall trend in CS is stable only in case of moderate declines (< 1 % per year).*
0	0	3	0	Deteriorating
1	0	2	0	
0	1	2	0	*(Decreasing trends dominate)*
0	0	2	1	** Trend magnitude should also be considered. The overall trend in CS is declining only in case of important declines (> 1 % per year).*
0	2	1	0	
1	1	1*	0	
0	0	0	3	Unknown
1	0	0	2	
0	1	0	2	*(Unknown trends dominate)*
0	0	1	2	
1	0	1	1	
0	1	1	1	

Note: “unknown” in the table above includes both “unknown” and “uncertain”.

10.7 Change and reasons for change in conservation status and conservation status trend

As the reporting period 2013-2018 is the first period, there is no need to fill in this section from the previous reporting period. Although an indication of change might be given in field 10.8 “Additional information”.

This field is used to indicate if there is any change since the previous reporting period (2007–2012) in conservation status and/or in trend in conservation status and, if so, what the reason for this change is.

First answer the question “(a) no, there is no difference” (Yes if there is a difference and No if there is not) separately for overall assessment of conservation status and overall trend in conservation status.

If the answer to the initial question is “Yes”, indicate which of the following options apply (separately for overall assessment of conservation status and overall trend in conservation status; it is possible to reply “Yes” to more than one of the options b-d, but at least one option “Yes” must be selected for options b-e):

b) yes, due to genuine change;
c) yes, due to improved knowledge/more accurate data;
d) yes, due to the use of different method;
e) yes, but there is no information on the nature of change.

Finally, it should be indicated (separately for overall assessment of conservation status and overall trend in conservation status) whether any difference is mainly due to:

- genuine change;
- improved knowledge or more accurate data;
- the use of a different method.

If a country wishes to give further information, this can be done in field 10.8 “Additional information”.

10.8 Additional information (optional)

Additional information to help understand the information in fields 10.1 to 10.7.

11 The Emerald Network coverage for Resolution No. 4 (1996) on habitat types

This section provides information on surface area of habitat and trend of surface area in good condition within the Emerald Network. The requested information should cover the proposed Emerald sites, the Emerald Candidate and Adopted sites of the Emerald Network within the biogeographical/marine region concerned.

The information relates to all Emerald sites where the habitat is present, not only those sites where the habitat is declared as a target habitat or a conservation objective.

See background information in Section “11 The Emerald Network coverage for Resolution No. 4 (1996) on habitat types“ (in “Definitions and methods for habitat reporting”).

11.1 Surface area of the habitat type inside the Emerald Network

Indicate the surface area of the habitat type within the network in the biogeographical or marine region concerned, including all the sites where the habitat type is present. Follow the same guidance as for the surface area of the habitat in field 5.2.

11.2 Type of estimate

The type of estimate for the reported interval in field 11.1(a) and (b) or the best single value in field 11.1(c) should be outlined here. The options for reporting this are: best estimate, 95 % confidence interval, and minimum.

Follow the same guidance as for the “Type of estimate” for the surface area covered by the habitat (field 5.3).

11.3 Surface area of the habitat type inside the network – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate (e.g. complete habitat mapping or data from previous habitat mapping updated with robust monitoring data on trends);
b) based mainly on extrapolation from a limited amount of data (e.g. using modelling or extrapolation from surveys of parts of the habitat distribution; using data from previous complete habitat mapping updated with good trend data; using models);
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

Follow the same guidance as for field 5.4 “Surface area – Method used” for the area covered by the habitat.

11.4 Short-term trend of habitat area in good condition within the network – Direction

A trend is a (measure of a) directional change of a parameter over time. The trend of habitat area in good condition should inform on changes in proportions between the habitat areas in good and not-good condition within the Emerald Network. Although rare in the case of range of habitat area, fluctuation (or oscillation) is not a directional change of a parameter, and therefore fluctuation is not a trend.

Indicate whether the trend of habitat area in good condition is:

stable / increasing / decreasing / uncertain / unknown

Short-term trend within the Emerald Network should be assessed over the period indicated in field 6.3.

11.5 Short-term trend of habitat area in good condition within the network – Method used

Choose one of the following categories:

a) complete survey or a statistically robust estimate;
b) based mainly on extrapolation from a limited amount of data;
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Only one category can be chosen; where data have been compiled from a variety of sources, choose the category for the most important source of data.

11.6 Additional information (optional)

Additional information to help understand Emerald coverage can be reported here.

12 Complementary information

This section is optional and is a place to include any additional information.

12.1 Justification of % thresholds for trends (optional)

The indicative suggested threshold for a large decline given in the evaluation matrix (Annex E) is 1 % per year. If another threshold has been used for the assessment please give details, including an explanation of why.

12.2 Other relevant information (optional)

Include any other information thought relevant to the habitat report and to assessing conservation status.

ANNEX E – EVALUATION MATRIX FOR ASSESSING CONSERVATION STATUS OF A HABITAT

The matrix is an aid to assessing the conservation status of a habitat. It shall be used for each biogeographical or marine region in which the habitat is present. The results of using the matrix have to be provided in Section “10 Conclusions” (in “Field-by-field guidance for habitat reports”).

ANNEX F – BIRD SPECIES' STATUS AND TRENDS REPORT FORMAT

Bird Species to be reported

For the first reporting period (2013-2018) it is decided to report only on a limited number of bird species. The selected species and habitats for the reporting under Resolution No. 8 (2012) are available on the Emerald Reference Portal.[40]

Field-by-field guidance for completing Bird species report

The Report format should be completed for each species on the selected species list and for each season falling under the criteria outlined in the chapter "Bird Species to be reported" (in "Field-by-field part") above and in Table 1 below.

The bird species' status and trends Report format ("species report") comprises nine sections, as follows:

1. Species information
2. Population size
3. Population trend
4. Breeding distribution map and size
5. Breeding distribution trend
6. Progress in work related to international Species Action Plans (SAPs), Management Plans (MPs) and Brief Management Statements (BMSs)
7. Main pressures and threats
8. Conservation measures
9. Emerald Network coverage

An overview of the sections of the Report format to be filled in for each species, including separately Resolution No. 6 (1998) on species and other migratory species triggering ASCI classification, is provided in Table 1. (not to be taken into account for the first reporting period)

Table 1: Sections of the species Report format to be filled in for breeding, winter and passage season for different categories of bird species (including Resolution No. 6 (1998) on species and other migratory species triggering ASCI classification)

Species category	Sections of the species Report format that should be filled in
All Resolution No. 6 (1998) [41] breeding species (including sedentary) and other migratory breeding species triggering ASCI classification	"Breeding" season report including Sections 1, 2, 3, 4, 5, Section 6 if relevant, Sections 7, 8 and 9

[40] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal
[41] Regardless of whether they are listed as ASCI trigger species nationally or not.

All Resolution No. 6 (1998) wintering species and other migratory wintering species triggering ASCI classification	"Winter" season report including Sections 1, 2, 3, Section 6 if relevant, Sections 7, 8 and 9
All Resolution No. 6 (1998) passage species and other migratory species triggering ASCI classification on passage	"Passage" season report including Sections 1, 2, Section 6 if relevant, Sections 7, 8 and 9.
All non- Resolution No. 6 (1998) breeding species (including sedentary)	"Breeding" season report including Sections 1, 2, 3, 4, 5, Section 6 if relevant, plus Sections 7, 8, 9 if also an ASCI trigger. Although not mandatory, countries are encouraged to provide information for Sections 7 and 8
Non- Resolution No. 6 (1998) wintering species (if not already reported in breeding season)	"Winter" season report including Section 1, Section 6 if relevant, Section 10, plus Sections 2, 7, 8, 9 if also an ASCI trigger. Key wintering species should be reported as stated below (Other key wintering species). Sections 2 and 3 must be provided. Although not mandatory, countries are encouraged to provide a separate "winter" season report with information for Sections 1 and 2, Section 6 if relevant, Sections 7 and 8.
Non- Resolution No. 6 (1998) passage species (if not already reported in breeding or wintering season)	"Passage" season report including Section 1, Section 6 if relevant, Section 10, plus Sections 7, 8, 9 if also an ASCI trigger. Although not mandatory, countries are encouraged to provide a separate "passage" season report with information for Sections 1 and 2, Section 6 if relevant, Sections 7 and 8
Other breeding species	"Breeding" season report including Sections 1, 2, 3, 4, 5, plus Section 6 if relevant.
Other key wintering species	"Winter" season report including Sections 1, 2, 3, plus Section 6 if relevant.

Notes:

"Breeding", "winter", and "passage" report in the table above correspond to the season selected in field 1.8.

For sedentary Resolution No. 6 (1998) species only one report, based on breeding season data, is requested (breeding report), but pressures and threats and conservation measures (reported under Sections 7 and 8) should cover the whole year, not only pressures or measures specific to the breeding season.

For Resolution No. 6 (1998) and other ASCI trigger species with different breeding, wintering and/or passage populations within the country, there should be separate reports for breeding, wintering and/or passage season.

Section 6 should be completed for species with international[42] SAPs, MPs or BMSs (as specified in the species checklist on the Reference Portal[43]).

[42] Or at least "multilateral" (a few SAPs and BMSs relate to taxa that are endemic to a single country).

[43] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

Even though not all data used in the report will be collected during the reporting period, the report should give information of relevance for the period 2013–2018.

Any free-text information provided is written in English, to facilitate its use during the European analysis and to allow a wider readership.

1 Species information

1.1 Country

Use the relevant country code from the list on the Reference Portal[44].

1.2 Species code

Use the species codes given in the species checklist (and code list) on the Reference Portal. New codes can be allocated if necessary. More information on the species code list and possible amendments can be found on the Reference Portal.

1.3 EURING code

Use the EURING codes given in the species checklist (and code list) on the Reference Portal. Unique EURING codes have been allocated to nearly every bird species (and several subspecies) native to Europe, for the purposes of coordinating European bird ringing, and are widely used[45].

1.4 Species scientific name

Use the scientific names given in the species checklist on the Reference Portal, which has been updated to reflect the nomenclature and taxonomy adopted in latest version of the *List of birds of the European Union*[46]. In a small number of cases, the entry for scientific name includes the English phrase "all others", to indicate that the taxonomical unit in question includes all of the remaining (native) subspecies.

1.5 Subspecific population

Where relevant, use the subspecific population descriptions given in the species checklist on the Reference Portal. In many cases, the subspecific population names relate to the brief descriptions used to identify distinct flyway populations of AEWA species. In others, they clarify a taxonomical or nomenclatural treatment applied in the checklist, or help to distinguish introduced populations of species which are native elsewhere.

1.6 Alternative species scientific name (optional)

If the scientific name given under field 1.4 differs from that in general national usage, countries may enter an alternative here.

---

[44] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal
[45] Source file: http://blx1.bto.org/euringcodes/species.jsp

[46] http://ec.europa.eu/environment/nature/conservation/wildbirds/eu_species/index_en.htm

1.7 Common name (optional)

If countries wish to enter the common name of the species (or subspecies) used nationally, they may do so here. This could be useful if the draft report will be circulated for comments to people who may not be familiar with the scientific name, or when communicating the report with the public.

1.8 Season

Select the season in which most of the data being reported were collected, with the options "Breeding", "Winter" and "Passage".

2 Population size

2.1 Year or period

Enter the year or period during which the population size was last determined: YYYY (for year) and YYYY–YYYY (for period, year–year).

Many reports will involve periods, because the population size of many species is commonly estimated during national atlas projects, which usually involve several years of fieldwork. In many cases the fieldwork will extend outside the limits of the current reporting period (2013–2018). The year or period reported should cover the actual period during which the data were collected.

In some cases the population size will be estimated based on a complete species census or inventory that took place during the previous reporting period but which has been updated with the results of regular monitoring or using data from online-systems for collecting field data. The year or period reported should be that which the reported estimate of population size relates to.

2.2 Population size

Use the population units (field **2.2(a) "Unit"**) specified for each species in the species checklist. To allow the overall European population size of each species to be calculated, all countries should report their national data using the same population unit. For the vast majority of breeding species, numbers should be reported in units of breeding pairs ("p"), acknowledging that the estimates for many species, including many common and widespread ones, are in practice often based on the number of occupied territories (e.g. singing males) during the breeding season. When the breeding population size is reported as breeding pairs, but the figures are derived from primary field data collected using another unit (e.g. apparently occupied nests for certain seabirds), this information can be provided in field 2.7 "Additional information".

In a small minority of cases involving species with an unusual/complex breeding biology or cryptic behaviour, other units – such as breeding females ("bfemales") or calling males ("cmales")[47] – are more appropriate than pairs for reporting population size. Such species include certain harriers, crakes, bustards and grouse. The units for reporting the population size of such species are indicated in the species checklist on the Reference Portal[48].

[47] Note that the proposed unit "lekking males" was subsumed within "cmales", in order to keep the Resolution No. 8 (2012) population units consistent with those used in the Emerald Standard Data Form (SDF).
[48] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

For “winter” and “passage” season reports, population size should be reported, as appropriate, using the unit individuals (“”").

Three fields are now available for the reporting of population size values: “**(b) Minimum**”; “**(c) Maximum**”; and “**(d) Best single value**”. The number of fields used will vary according to the nature of the population size information available for the species in question (see below), but should follow one of the following logical combinations: (b) and (c); just (d); or (b), (c) and (d).

If a precise estimate of population size does not exist, with estimates only available as a range (i.e. minimum–maximum), these two values should be reported in fields (b) and (c). Countries are encouraged to provide plausible minimum and maximum population sizes even for poorly-known species, to minimise the uncertainty carried over into the estimation of overall European population size and trends (which involves “weighting” by national population sizes), but where this is not possible, a lower limit can still be reported in field 2.2(d) (preferably with a complementary note in field 2.7, e.g. “Maximum population size unlikely to exceed 100 000 pairs”), with “minimum” selected under field 2.3 “Type of estimate”.

If the population is very well monitored (and often, but not always, relatively small), a single precise value may be available, in which case this can be reported in field (d). In other cases, a range (minimum–maximum) and a mean or “most-likely” value may be available, in which case these can all be provided, in fields (b), (c) and (d).

In a situation where only a minimum (or maximum) value of the population size is known (e.g. through expert opinion) this should be entered in the (d) “Best single value” field and NOT the (b) “Minimum” or (c) “Maximum” fields.

Where raw data and/or precise estimates exist, these should be reported without rounding at country level; any such rounding will be done later at European level, as necessary.

If the species has gone extinct nationally since 1980 (i.e. its occurrence is listed as “EXBA” in the national checklist), “0” should be entered in field (d), and some indication of the timing of the extinction (e.g. ‘*Last recorded breeding in 1998.*’) should ideally also be provided in field 2.7. If it is not clear whether the species has gone extinct nationally or still persists in very small numbers, values of “0” and, for instance, “1” can be entered in fields (b) and (c) respectively.

2.3 Type of estimate

Select the most appropriate description of the type of population size estimate reported under field 2.2. If values have been provided for all of fields 2.2(b), (c) and (d), choose the category that best describes the data (often “multi-year mean” or “95 % confidence interval”). Further details of the options are provided below:

- best estimate – the best available single figure (including where only the maximum value of the population size is available) or interval, derived from, for example, a population census, a compilation of figures from localities, an estimate based on population densities and distribution data, or expert opinion, but for which 95 % confidence limits have not been calculated. Whether a best estimate comes from monitoring data, extrapolation or expert opinion can be indicated in field 2.4;

- multi-year mean – average value (and interval, i.e. worst and best years' estimates) where population size has been estimated for several years during the reporting period (as indicated by the entry in field 2.1);
- 95 % confidence interval – estimates derived from sample surveys or a model for which 95 % confidence limits (as reported in fields 2.2(b) and 2.2(c)) could be calculated for the best single value (reported in field 2.2(d));
- minimum – where insufficient data exist to provide even a loosely bounded estimate, but where a population size is known to be above a certain value, or where the reported interval estimates come from a sample survey or monitoring project which probably underestimate the real population size.

If both interval (fields 2.2(b) "Minimum" and 2.2(c) "Maximum") and single values (field 2.2(d) "Best single value") are provided, field 2.3 "Type of estimate" should correspond to the most accurate estimate. This should be noted in field 2.7 "Additional information".

2.4 Method used

This field is used to detail the methodology used to estimate the population size in field 2.2. Select one of the following categories:

a) complete survey or a statistically robust estimate (e.g. from sample surveys of the majority of the known distribution);
b) based mainly on extrapolation from a limited amount of data (e.g. from sample surveys of a small proportion of the range, using models based on density/abundance and distribution data, or from an existing estimate updated using trend data);
c) based mainly on expert opinion, with very limited data;
d) insufficient or no data available.

If both interval (fields 2.2(b) "Minimum" and 2.2(c) "Maximum") and single values (field 2.2(d) "Best single value") are provided, the Method used should correspond to the more accurate estimate. This should be noted in field 2.7 "Additional information".

2.5 Sources

To create the necessary audit trail for the data reported in fields 2.1 to 2.4 above, enter the details of the key references or other sources of information used to complete these fields. Such sources may include, for example, published papers, unpublished data held in databases, websites and expert working groups. It is preferable to provide enough information so that anyone reviewing the report (or updating it in 6 or 12 years' time) will be able to understand the origin of the data reported.

2.6 Change and reason for change (since previous report)

This field is used to indicate if there has been any change since the previous reporting period (2008–2012) in the population size reported and, if so, to describe the nature of this change.

First answer the question: "Is there a change between reporting periods" (i.e. is the population size different from the last reporting period)? YES/NO.

If the answer is "Yes", indicate which of the following options apply (it is possible to reply "Yes" to more than one of the options a–c, but at least one option "Yes" must be selected for options a–d)[49]:

a) yes, due to genuine change;
b) yes, due to improved knowledge or more accurate data;
c) yes, due to the use of a different method[50] (including taxonomical change);
d) yes, but there is no information on the nature of the change.

Finally, it should be indicated whether any difference is mainly due to (select one option):

- genuine change;
- improved knowledge or more accurate data; or
- the use of a different method.

If a country wishes to give further information, this can be done in field 2.7 "Additional information".

2.7 Additional information (optional)

This optional field can be used to provide supplementary free-text information (maximum 500 characters) relevant to the data provided for the assessment of population size under fields 2.1 to 2.6, such as details of any conversion factors used to convert field estimates of population size to breeding pairs (see text for field 2.2). For example, if, because of a change in methods, a country reports the same population size as in the previous report even though there has been a genuine change, this can also be noted here.

3 Population trend

3.1 Short-term trend (last 12 years)

Fields 3.1.1 to 3.1.5 are used to provide information on the short-term trends in population, based on a 12-year period.

3.1.1 Short-term trend period

The period for short-term trends is 12 years (corresponding approximately to two reporting cycles). For the 2013–2018 reports, this means the period is 2007–2018, or a period as close as possible to this. Some flexibility is permitted, so although trends would ideally be reported for 2007–2018, data from 2005–2016, for example, will be accepted if the best available data relate to surveys in those years, or if using an earlier end point means that the national report under Resolution No. 8 (2012) can be delivered without delay. Nevertheless, note that – as national trends need to be combined to estimate the overall European-level trend for 2007–2018 – any trends not reported for the "ideal" trend period will be extrapolated or truncated, as appropriate (see Section "Extrapolating to idea

[49] It is a common phenomenon for a rare species to attract increased attention. As a result, more people search for it and find it, causing the population size estimate to be revised, and often substantially increased. Nevertheless, it may still be clear that the species is actually declining, based on analyses of data from sites with reliable historical trends. In this case, the options for "improved knowledge/more accurate data" above should be selected. Field 2.7 "Additional information" (below) allows a country to provide further details on why a population size estimate has increased, even though a population decline is reported in Section 3 below.

[50] Improved interpretation or the correction of errors in the interpretation of underlying data should be included under "different method".

trend periods" (in "3 Population trend" in "Definitions and methods part"). Indicate the period in this field.

3.1.2 Short-term trend direction

Indicate if the population trend over the period reported in field 3.1.1 was:

stable / fluctuating / increasing / decreasing / uncertain / unknown

Distinguishing "stable" trends from slightly "increasing" or "decreasing" trends will depend on the nature of the trend information available for the species in question. Where statistically robust monitoring data are available, it should be possible to distinguish (and hence report) relatively slight – but statistically significant – increases or decreases (e.g. if the 95 % confidence intervals of the change do not overlap zero). On the other hand, if the allocation of trend direction category is based on less robust data (or expert opinion), a specified threshold (an overall change of 10 % over the trend period) should be used to distinguish "stable" from "increasing" or "decreasing" trends. In both cases, countries are encouraged to provide relevant explanatory/supplementary information in field 3.3 "Additional information" (e.g. 'Short-term trend from national common bird monitoring scheme for the period 2007–2018 was -0.4 % (with 95 % CI: = -1.1 % & +0.4 % per year), so change for the whole period was -4 % (95 % CI: -11 % and +4 %); hence categorised as "stable"). For further guidance see Section "" (in "3 Population trend" in "Definitions and methods part").

"Fluctuating" applies to species whose average population level did not change significantly over the trend period, but which are characterised by large interannual variations in abundance, sometimes of one or two orders of magnitude. Species that typically show such dynamics include Boreal and Arctic breeding species, such as certain owls and crossbills, whose abundance is closely linked to the availability of food that shows cyclical peaks and troughs but the category may also apply to species that are particularly affected by adverse or variable climatic conditions. Countries are requested to restrict use of this category to species that show interannual population increases/decreases of ≥ 50 %. This includes species that, overall, are adjudged to breed or winter "regularly" (e.g. more often than not), but may still not occur every year.

The category "uncertain" should be used in cases where some monitoring data are available, but these data are not sufficient to reliably determine trend direction (e.g. because sample sizes are small and/or the monitoring scheme was only established relatively recently). Further details, e.g. of the available data and/or expert opinion of the likely "real" trend, can be provided in field 3.3. "Additional information". Trends from national common bird monitoring schemes categorised as "uncertain" by TRIM[51], for example, should be reported using this category (not "fluctuating").). For further guidance see Section "Fluctuating" and "uncertain' trends" (in "3 Population trend" in "Definitions and methods part").

The trend category "unknown" should be used only in cases where there is no information – quantitative or qualitative – available on the national trend of the species. However, even in these instances, national experts will often have a sense of more likely trend scenarios – or at least of the

[51] Trends and Indices for Monitoring data [freeware programme]: used by many common bird monitoring schemes to analyse national survey data (see http://www.ebcc.info/trim.html).

plausible "limits" of any potential increase or decrease – and any indication of this[52] could still be very helpful when carrying out the European-level population status assessments.

Further guidance related to population trends is given in Section "3 Population trend" (in "Definitions and methods part").

3.1.3 Short-term trend magnitude

If "increasing", "decreasing" or "uncertain" is reported in field 3.1.2, enter the overall percentage change in population size over the trend period specified in field 3.1.1. If available, the trend magnitude (in field 3.1.3) can also be reported for "stable" and or "fluctuating[53]" trends (e.g. the confidence interval of "stable" trends). If this is only available as a range (e.g. 20–30 %), these two values should be reported in "(a) Minimum" and "(b) Maximum". If a precise figure (e.g. 27 %) is available, this should be entered in "(c) Best single value". Where a mean or "most-likely" trend is available, along with 95 % confidence limits these three values can all be reported, in (c), (a) and (b) respectively. In a situation where only a minimum (or maximum) value is known (e.g. through expert opinion) this should be entered in the "Best single value" field and NOT the "(a) Minimum" or "(b) Maximum" fields.

In the specific case of species that have colonised or became established during the trend period (e.g. those listed as newly arriving ["ARR"] in the national species checklist), the magnitude of any population increase should be calculated based on the population size in the initial year[54]. For example, if a species first bred (one pair) in 2012, but the breeding population in 2018 is eight pairs, "2012–2018" should be entered in field 3.1.1, "increasing" should be selected in field 3.1.2, and "700" (i.e. the percentage increase from one to eight) should be entered in field 3.1.3(c). Ideally, a complementary note confirming the year of colonisation and the initial population size (e.g. "Species first bred (one pair) in 2012") in field 3.3 "Additional information" should also be provided.

In contrast, for species that have gone extinct nationally during the trend period, simply reporting a decrease of 100 % does not provide all the information needed to assess the relative importance of the decline (declines to zero from starting population sizes of, for instance, one and 100 both represent decreases of 100 %). In the example of a species that had a breeding population of 10 pairs in 2007, but went extinct as a breeder in 2015, "2007–2015" should be entered in field 3.1.1, "decreasing" should be selected in field 3.1.2, "100" should be entered in field 3.1.3(c), and a complementary note indicating the population size in 2007 (e.g. "*Species declined from 10 breeding pairs in 2007 to extinction as a breeding species in 2015*") should be added in field 3.3 "Additional information".

Although trend magnitudes are not mandatory for trends reported as "stable" or "fluctuating", any relevant explanatory/supplementary information – such as the confidence intervals of "stable" trends or further details on fluctuations – can be provided under 3.1.3 "Short-term trend magnitude" or in field 3.3 "Additional information", as appropriate.

---

[52] For example, a note in field 3.3 "Additional information" along the lines of *"No reliable information available on short-term trend, but not believed to have decreased or increased by more than 30 % over the ideal trend period*"

[53] All such trends are treated as showing no net change overall when estimating the European-level trend.

[54] To avoid the problem of calculating a percentage from a baseline of zero.

3.1.4 Short-term trend – Method used

Use one of the following categories:

a) complete survey or a statistically robust estimate (e.g. comparison of two estimates of population size originating from complete censuses, or dedicated population monitoring with good statistical power);
b) based mainly on extrapolation from a limited amount of data (e.g. trends derived from data collected only from a relatively small sample of the population, or based on insufficient sample size, or trends extrapolated from some other measurements);
c) based mainly on expert opinion, with very limited data;
d) insufficient or no data available.

Where data have been compiled from a variety of sources, use the category for the most important source of data.

3.1.5 Sources

To create the necessary audit trail for the data reported in fields 3.1.1 to 3.1.4 above, enter the details of the key references or other sources of information used to complete these fields. Such sources may include, for example, published papers, unpublished data held in databases, websites and expert working groups. It is preferable to provide enough information so that anyone reviewing the report (or updating it in six or 12 years' time) will be able to understand the origin of the data reported.

3.2 Long-term trend (since *c.*1980)

3.2.1 Long-term trend period

The ideal period for reporting long-term trends is from *c.*1980 (when the Birds Directive was adopted/entered into force) until *c.*2018. However, there is some flexibility here, and hence if a country has conducted national censuses in (for example) 1980, 1995 and 2015, the trend between 1980 and 2015 should be reported. Indicate the period in this field.

Countries lacking population monitoring scheme data from before 2000 are encouraged to consult other potential sources of trend information, such as the two editions of Birds in Europe[55], which present banded estimates of national population trend (plus supporting references) for most species for 1970–1990 and 1990–2000.

3.2.2 Long-term trend direction

See field 3.1.2 above.

If the allocation of trend direction category is based on less robust data (or expert opinion), a specified threshold (an overall change of 20 % over the long-term trend period) should be used to distinguish "stable" from "increasing" or "decreasing" trends (the 10 % threshold is used for the short-term trend in field 3.1.2).

---

[55] Tucker, G.M. & Heath, M.F. (1994) *Birds in Europe: their conservation status*. BirdLife International (BirdLife Conservation Series No. 3), Cambridge, UK.
BirdLife International (2004) *Birds in Europe: population estimates, trends and conservation status*. BirdLife International (BirdLife Conservation Series No. 12), Cambridge, UK.

Further guidance related to population trends is given in Section "3 Population trend" (in "Definitions and methods part")

3.2.3 Long-term trend magnitude

See field 3.1.3 above.

3.2.4 Long-term trend – Method used

See field 3.1.4 above.

3.2.5 Sources

See field 3.1.5 above.

3.3 Additional information (optional)

This section can be used to provide supplementary free-text information (maximum 500 characters) relevant to the data provided for the assessment of population trends under Sections 3.1 and 3.2 (see text of preceding fields for suggestions).

4 Breeding distribution map and size

Sections 4 and 5 apply only to those species for which "breeding" season reports are requested, as listed in the species checklist on the Reference Portal[56]. National breeding bird atlases already exist for many countries, and additional work for a new European Breeding Bird Atlas ("EBBA2") is being undertaken during 2013–2017[57]. In contrast, few countries have published national wintering bird atlases, and many bird species are much more mobile in winter anyway. Hence, no winter distribution data are requested.

4.1 Sensitive species

Some species are particularly vulnerable to persecution, illegal killing or collecting, and hence might face genuinely increased risks to their conservation or management if detailed information about their distribution were to be made publicly available. In a minority of cases, countries may consider a species to be at risk if its distribution is made publicly available at the standard 10 × 10 km grid scale requested (see Section 4.3). Where information on distribution if reported according to the specifications in field 4.3 is considered "sensitive", this can be indicated by entering "Yes" in this field.

If a species is marked as "sensitive", the Bern Convention Secretariat and the EEA will not disclose its distribution to the public (for instance, by posting this information on a publicly available database or Internet-based site).

4.2 Year or period

Enter the year (e.g. 2015) or period (e.g. 2013–2017) when the breeding distribution was last determined. Many reports will involve periods, because the distribution of most species is commonly

[56] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal
[57] http://www.ebba2.info/what-is-ebba2-and-why-ebba2/

mapped during national atlas projects, which usually involve several years of fieldwork. The year or period reported should cover the actual period during which the data were collected.

Where no recent atlas information exists, countries are encouraged to report a more up-to-date figure, by remapping the national distribution using other data, such as the results of annual monitoring schemes, data gathered from the Internet, and national or regional surveys. In such cases the distribution map will be elaborated based on data from the previous reporting period or using older distribution data that has been updated with the results of regular monitoring or using data from online-systems for collecting data. The year or period reported should be that which the reported distribution relates to.

4.3 Breeding distribution map

Submit a distribution map, together with the relevant metadata (projection, datum, scale). The standard is 10 ×10 km ETRS89 grid, projection ETRS LAEA 5210. The distribution dataset will consist of the 10 km grid cells where the breeding is recorded or likely (see below guidance for mapping the species distribution); the use of attribute data to indicate the presence or absence of a species in a grid cell is not permitted. The period over which the distribution data were collected should be included in the metadata following the INSPIRE guidelines[58]. The technical specifications for distribution maps are given on the Reference Portal.

For smaller countries or for other small territories (e.g. Islands) maps using 5x5 km or 1x1 km grids are allowed. These will be aggregated to 10 x 10 km for visualisation at the European level.

The grids for individual countries are available for download from the Reference portal.

The map should show the breeding occurrence (i.e. presence or absence) of the species in each grid cell. In general, only grid cells where breeding is “confirmed”, “probable” or “possible” should be included; for definitions of breeding categories and codes, refer to Table 2 in the ‘Methodology’ for the new European Breeding Bird Atlas[59]. However, in cases where survey coverage and data availability are known to be poor, cells considered likely to hold breeding populations (especially common species) may be included as well, using expert knowledge or modeling. In these cases further information related to data reliability can be provided in field 4.8 “Additional information”.

4.4 Breeding distribution surface area

Enter the total surface area of the current distribution in the country, in km². In most cases this will be the number of occupied 10 × 10 km squares multiplied by 100. The surface area of distribution should be represented by grids (10 x 10 km) which occur entirely or partly within the country (i.e. grids intersected by the country boundaries should be counted entirely).

For localised species it is possible to report distribution surface area using finer resolution; for example, for species restricted to a single location, distribution area is the area of a locality where species occurs, which can be several hectares.

---

[58] For the period 2013-2018 it is not obligatory to provide the Resolution No. 8 (2012) spatial dataset compliant with INSPIRE requirements.

[59] http://www.ebba2.info/wp-content/uploads/2015/01/EBBA2_methodology_final.pdf

4.5 Method used

This field is used to detail the methodology used for calculating breeding distribution surface area in field 4.4. Select one of the following categories:

a) complete survey or a statistically robust estimate;
b) based mainly on extrapolation from a limited amount of data;
c) based mainly on expert opinion, with very limited data;
d) insufficient or no data available.

Where data have been compiled from a variety of sources, use the category for the most important source of data.

The "Method used" should be reported as "(d) Insufficient or no data available" if the distribution map on which the estimated surface area of distribution is based (obtained through comprehensive mapping, modeling or extrapolation, or, exceptionally, expert interpretation) covers less than 75 % of the presumed actual species distribution and no other data were used to fill in this gap in estimating the surface area of distribution (i.e. the resulting map is incomplete in relation to the presumed species distribution and so the surface area of distribution is underestimated).

4.6 Additional maps (optional)

This is for cases where a country wishes to submit an additional map different from the standard submission map under field 4.3. Note that this is an optional field and does not replace the need to provide a map under field 4.3.

Maps at a resolution other than 10 × 10 km or with grids other than the ETRS89 LAEA 5210 grid, close to 10 × 10 km, may be reported here.

4.7 Sources

To create the necessary audit trail for the data reported in fields 4.1 to 4.6 above, enter the details of the key references or other sources of information used to complete these fields. Such sources may include, for example, published papers, unpublished data held in databases, websites and expert working groups. It is preferable to provide enough information so that anyone reviewing the report (or updating it in 6 or 12 years' time) will be able to understand the origin of the data reported.

4.8 Additional information (optional)

This section can be used to provide supplementary free-text information (maximum 500 characters) relevant to the data provided for the assessment of breeding distribution under fields 4.1 to 4.7.

5 Breeding distribution trend

5.1 Short-term trend (last 12 years)

Fields 5.1.1 to 5.1.5 are used to provide information on the short-term trends in breeding distribution, based on a 12-year period.

5.1.1 Short-term trend period

The period for short-term trends is 12 years (two reporting cycles). For the 2013–2018 reports, this means the period is 2007–2018, or a period as close as possible to this. Some flexibility is permitted,

so although trends would ideally be reported for 2007–2018, other data spanning a different but comparable time period (e.g. 2004–2017) will be accepted if the best available data relate to surveys in those years. Indicate the period used in this field.

5.1.2 Short-term trend direction

Indicate whether the distribution trend over the period reported in field 5.1.1 was:

stable / fluctuating / increasing / decreasing / uncertain / unknown

See the text for field 3.1.2 for further guidance on the interpretation and use of these trend direction categories. The category "fluctuating" will probably apply to fewer distribution trends than population trends, but may still be appropriate, for example, in cases where the national distribution of a (regularly occurring) species is strongly influenced by seasonal conditions elsewhere (e.g. the drying-out of favoured wetland sites further south).

5.1.3 Short-term trend magnitude

If "increasing", "decreasing" or "uncertain" is reported in field 5.1.2, enter the overall percentage change in distribution size over the trend period specified in field 5.1.1. If available, the trend magnitude can also be reported for "stable" or "fluctuating" trends. If this is only available as an interval (e.g. 20–30 %), these two values should be reported in "(a) Minimum" and "(b) Maximum". If a precise figure (e.g. 27 %) is available, this should be entered in "(c) Best single value". If a mean or "most-likely" trend is available, along with 95 % confidence limits, these three values can all be reported, in (c), (a) and (b) respectively. In a situation where only a minimum (or maximum) value is known (e.g. through expert opinion) this should be entered in the "Best single value" field and NOT the "(a) Minimum" or "(b) Maximum" fields.

See the related text for field 3.1.3 for guidance on the specific cases of species that have either colonised or have gone extinct nationally during the trend period.

5.1.4 Short-term trend – Method used

This field is used to detail the methodology used for calculating the short-term trend magnitude. Select one of the following categories:

a) complete survey or a statistically robust estimate (e.g. comparing two distribution maps based on accurate distribution data, or dedicated monitoring of a species' distribution with good statistical power);
b) based mainly on extrapolation from a limited amount of data (e.g. trends derived from occurrence data collected for other purposes, or from data collected from only a part of the geographical range of a habitat, or trends based on measuring some other predictors of habitat distribution, such as land-cover changes);
c) based mainly on expert opinion, with very limited data;
d) insufficient or no data available.

5.1.5 Sources

To create the necessary audit trail for the data reported in fields 5.1.1 to 5.1.4 above, enter the details of the key references or other sources of information used to complete these fields. Such sources may include, for example, published papers, unpublished data held in databases, websites

and expert working groups. It is preferable to provide enough information so that anyone reviewing the report (or updating it in six or 12 years' time) will be able to understand the origin of the data reported.

5.2 Long-term trend (since *c*.1980)

5.2.1 Long-term trend period

The ideal period for reporting long-term trends is from *c*.1980 (when the Birds Directive was adopted/entered into force) until *c*.2018. However, there is some flexibility here, and hence if a country has conducted national atlas surveys in (for example) 1980, 1995 and 2015, the trend between 1980 and 2015 should be reported. Indicate the period in this field.

Countries lacking distribution trend data from before 2000 could consult the EBCC Atlas[60] or *Birds in Europe*[61], which presents banded estimates of national range trend for species between 1970 and 1990.

5.2.2 Long-term trend direction

See field 5.1.2 above.

5.2.3 Long-term trend magnitude

See field 5.1.3 above.

5.2.4 Long-term trend – Method used

See field 5.1.4 above.

5.2.5 Sources

See field 5.1.5 above.

5.3 Additional information (optional)

This section can be used to provide supplementary free-text information (maximum 500 characters) relevant to the data provided for the assessment of breeding distribution trend under Sections 5.1 and 5.2. For example, a country may wish to report information about geographical shifts in distribution (short-term or long-term), or fragmentation of the distribution, even though no changes in overall distribution size are reported.

6 Progress in work related to international Species Action Plans (SAPs), Management Plans (MPs) and Brief Management Statements (BMSs)

This section is designed to capture information about countries' work on some of the European most threatened bird species, for which international (or multilateral[62]) Species Action Plans (SAPs) or Brief

[60]Hagemeijer, E.J.M. & Blair, M., eds. (1997) *The EBCC Atlas of European Breeding Birds: their distribution and abundance*. T & A D Poyser, London.
[61]Tucker, G.M. & Heath, M.F. (1994) *Birds in Europe: their conservation status*. BirdLife International (BirdLife Conservation Series No. 3), Cambridge, UK.

Management Statements (BMSs) have been developed[63]. The reporting includes work done within the framework of plans adopted under the Bern Convention[64], by the EU or by the African-Eurasian Waterbird Agreement (AEWA)[65].

Since the 1990s, significant resources have been spent on the conservation of many of these species (e.g. through LIFE projects), so countries are requested to summarise what they have done at national level to implement these plans and to improve the status of the relevant species. The list of relevant species with an indication of a type of plan is given in Table 2. If the species is reported in more seasons this section should be filled in for the most relevant season(s).

Table 2: The list of taxa with international or multilateral plans, plus the type of these plans (entry for "Plan type" contains hyperlinks to completed plans or the most relevant resources for plans currently under development). A more detailed list including objectives to be considered in the assessments under fields 6.4 and 6.5 for each species (and any subsequent updates of this table) can be found on the Reference Portal[66].

Taxon	Plan type
Accipiter gentilis arrigonii	BMS – EU
Accipiter nisus granti	BMS – EU
Acrocephalus paludicola	SAP – International
Aegypius monachus	SAP – European [1996]; SAP – International [in prep.]; MSAP – International (CMS) [in prep.]
Alauda arvensis	MP – EU
Alectoris graeca whitakeri	BMS – EU
Anas acuta	MP – EU
Anser albifrons flavirostris	SAP – International (AEWA)
Anser brachyrhynchus [Svalbard/North-west Europe]	MP – European (AEWA)
Anser erythropus	SAP – International (AEWA)
Anser fabalis fabalis	SAP – International (AEWA)
Aquila adalberti	SAP – EU
Aquila fasciata [=*Hieraaetus fasciatus*]	SAP – European
Aquila heliaca	SAP – International [1996]; SAP – International [in prep.]
Aythya marila	MP – EU
Aythya nyroca	SAP – International (CMS/AEWA)

[62] In a few cases, the SAP/BMS relates to a species or subspecies that is endemic to a single country.

[63] http://ec.europa.eu/environment/nature/conservation/wildbirds/action_plans/index_en.htm for Species Action Plans and Brief Management Statements, and http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/managt_plans_en.htm for Manage ment Plans.

[64] https://wcd.coe.int/wcd/ViewDoc.jsp?Ref=Rec(2006)121&Language=lanEnglish&Ver=original&Site=DG4-Nature&BackColorInternet=DBDCF2&BackColorIntranet=FDC864&BackColorLogged=FDC864

[65] http://www.unep-aewa.org/publications/ssap/index.htm

[66] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

Taxon	Plan type
Botaurus stellaris	SAP – EU
Branta bernicla hrota [Canada & Greenland/Ireland]	SAP – International (AEWA)
Branta ruficollis	SAP – International (AEWA)
Calidris alpina schinzii [Baltic/SW Europe & NW Africa]	MSAP – International [in prep.]
Calidris pugnax [=*Philomachus pugnax*]	MSAP – International [in prep.]
Chersophilus duponti	SAP – EU
Chlamydotis undulata	SAP – EU
Circus macrourus	SAP – International (Bern)
Clanga clanga [=*Aquila clanga*]	SAP – International
Clanga pomarina [=*Aquila pomarina*]	SAP – International
Clangula hyemalis	SAP – International (AEWA)
Columba bollii	SAP – EU
Columba junoniae	SAP – EU
Columba trocaz	SAP – EU
Coracias garrulus	SAP – European
Coturnix coturnix	MP – EU
Crex crex	SAP – International (CMS/AEWA)
Cursorius cursor	SAP – EU
Cygnus columbianus bewickii	SAP – European (AEWA)
Dendrocopos major canariensis	BMS – EU
Dendrocopos major thanneri	BMS – EU
Emberiza cineracea	SAP – International (Bern)
Falco biarmicus	SAP – International
Falco cherrug	SAP – International (CMS)
Falco eleonorae	SAP – International
Falco naumanni	SAP – European
Falco rusticolus	SAP – International
Falco vespertinus	SAP – European
Ficedula semitorquata	SAP – European
Fringilla polatzeki [=*Fringilla teydea polatzeki*]	SAP – EU
Fringilla teydea [=*Fringilla teydea teydea*]	SAP – EU
Fulica cristata	SAP – International
Gallinago gallinago	MSAP – International [in prep.]
Gallinago media	SAP – International (AEWA)
Glareola nordmanni	SAP – International (AEWA)

Taxon	Plan type
Gypaetus barbatus	SAP – European [1997]; SAP – International [in prep.]; MSAP – International (CMS) [in prep.]
Haematopus ostralegus	MSAP – International [in prep.]
Haliaeetus albicilla [Danube population only]	SAP – European (Bern)
Hydrobates monteiroi [=*Oceanodroma monteiroi*]	SAP – EU [in prep.]
Larus audouinii	SAP – International
Larus canus	MP – EU
Limosa limosa [all subspecies / populations]	MP – EU; SAP – International (AEWA); MSAP – International [in prep.]
Loxia scotica	SAP – EU
Marmaronetta angustirostris	SAP – International
Melanitta fusca	MP – EU; SAP – International [in prep.]
Microcarbo pygmaeus [=*Phalacrocorax pygmeus*]	SAP – European
Milvus milvus	SAP – European
Neophron percnopterus	SAP – European; MSAP – International (CMS) [in prep.]
Netta rufina	MP – EU
Numenius arquata [*N. a. arquata* & *N. a. orientalis*]	SAP – International (AEWA); MSAP – International [in prep.]
Numenius tenuirostris	SAP – International
Otis tarda	SAP – International
Oxyura leucocephala	SAP – International (CMS/AEWA) [2006]; SAP – International [in prep.]
Pandion haliaetus	SAP – European (Bern)
Pelecanus crispus	SAP – European [1996]; SAP – International [in prep.]
Perdix perdix italica	BMS – EU
Phalacrocorax aristotelis desmarestii	SAP – EU
Platalea leucorodia	SAP – International (AEWA)
Pluvialis apricaria	MP – EU
Polysticta stelleri	SAP – European
Porphyrio porphyrio porphyrio	SAP – EU
Pterodroma deserta [=*Pterodroma feae*]	SAP – EU
Pterodroma madeira	SAP – EU
Puffinus mauretanicus	SAP – International
Puffinus yelkouan	SAP – International [in prep.]
Pyrrhula murina	SAP – EU
Saxicola dacotiae	SAP – EU (Bern)
Sterna dougallii	SAP – International

Taxon	Plan type
Streptopelia turtur	MP – EU; SAP – International [in prep.]
Tetrax tetrax	SAP – EU
Tringa totanus	MP – EU; MSAP – International [in prep.]
Vanellus vanellus	MP – EU; MSAP – International [in prep.]

Notes:

The scientific names in the "Taxon" column reflect the taxon names used in the Resolution No. 8 (2012) checklist available on the Reference Portal (with an exception of *Numenius arquata* and *Limosa limosa* (where the checklist lists the subspecies/subspecific population separately, but the plans are at the species-level). In cases where the Resolution No. 8 (2012) reporting unit in question refers to a distinct (flyway) population, this name (as it appears in Resolution No. 8 (2012) checklist) is provided in square brackets after the scientific name.

In cases where the current scientific name does not match that used in the plan, the old name/synonym has been given in square brackets (following a "=" sign);

Following acronyms were used for action/management plans: Species Action Plans (SAP), Management Plans (MP), Brief Management Statements (BMS) and Multispecies action plan (for multispecies vulture (CMS) and lowland-wader (EuroSAP) plans) (MSAP).

6.1 Type of international plan

Use the type of international plan (SAP, MP or BMS) specified in the species code list.

6.2 Has a national plan linked to the international SAP/MP/BMS been adopted?

Please select "Yes" or "No". If "Yes", please provide a web link to (and/or bibliographic reference for) the national plan in field 6.6 "Sources of further information" below.

6.3 If "No", describe any measures and initiatives taken related to the international SAP/MP/BMS

Briefly outline what actions have been implemented for the species in your country, preferably using the code numbers[67] in the plans for recommended actions per country, where relevant (maximum of 250 characters).

6.4 Assessment of the effectiveness of SAPs for globally threatened species (Species Action Plans)

This field is used to provide information on the species' national status (in terms of population size and range/distribution) in relation to objectives outlined in the SAPs/BMSs. The list of species with SAPs and BMSs for which this field should be filled in is provided in Table 2[68] above. A more detailed list including objectives to be considered in the assessment for each species is provided on the Reference Portal.

[67] For most of the SAPs and BMSs, proposed actions have a numerical code.

[68] Table 2 lists taxa with international or multilateral plans (including BMSs). Some of the species listed (e.g. *Falco naumanni*) are currently assessed as not threatened globally, but at the time the plan was drafted were considered threatened or had conservation problems which required a coordinated action.

Some plans list different short-term and long-term objectives. For example for *Aquila clanga* (*Clanga clanga*) the action plan lists the following objectives related to either distribution or population size; i) "in the short-term, to halt the decline in the population and safeguard all existing breeding, roosting and wintering habitat"; ii) "in the long term, to safeguard the distribution and numbers of the European population of the Greater Spotted Eagle, restoring the range to what it was in 1920". If the short-term objective (e.g. stabilisation of population size) has been achieved or there has been progress towards the objective, option "(a) moving towards the plan's aim/objective(s)"should be selected.

Some plans include objectives that are not directly expressed as an increase/stabilisation of population or distribution, but for example a reduction in mortality caused by certain pressures or the protection/restoration of certain key sites. The effectiveness of a plan should be assessed taking into account the impact of those measures to population size/distribution. For example if several key sites for a species have been restored (a short-term objective has been achieved) with a long-term aim to stabilise the population of a species but the population size is still declining (with an unchanged rate) the option "(b) unchanged" should be selected.

Please choose from one of the following options:

a) moving towards the plan's aim/objective(s);
b) unchanged;
c) further deteriorating away from the plan's aim/objective(s).

6.5. Sources of further information

In this field, countries are requested to provide links to appropriate websites, web links and/or bibliographic references for relevant publications (e.g. a national plan), contact details of responsible organisations, etc.

7 Main pressures and threats

This section is designed to capture information about the principal factors responsible for causing individual species to decline, suppressing their numbers or restricting their ranges. It should be completed for species of Resolution No. 6 (1998) regularly occurring and any other migratory species triggering ASCI designations nationally (as indicated in the species checklist). Countries are encouraged to provide this information for species which are not listed in Resolution No. 6 (1998).

More information related to season-specific reporting on breeding, winter or passage species listed in Resolution No. 6 (1998) and other ASCI trigger species can be found in Table 1: Sections of the species Report format to be filled in for breeding, winter and passage season for different categories of bird speciesin Section "Field-by-field guidance for completing Bird species report".

Pressures have acted within the current reporting period and they have an impact on the long-term viability of the species or its habitat(s); threats are future/foreseeable impacts (within the next two reporting periods) that are likely to affect the long-term viability of the species and/or its habitat(s) (see Table 3). The threats should not cover theoretical threats, but rather those issues judged to be reasonably likely. This may include continuation of pressures.

Table 3: Definition of a pressure and threat (in the context of reporting under Resolution No. 8 (2012))

	Period of action/definition	Time-frame
Pressure	Acting now and/or during (any part of or all of) the current reporting period.	Current 6-year reporting period.
Threat	Factors expected to act in the future after the current reporting period.	Future two reporting periods, i.e. within 12 years following the end of the current reporting period.

7.1 Characterisation of pressures/threats

Provide the list of pressures and/or threats and a ranking of their impact: list a maximum of 10 pressures and a maximum of 10 threats. Only pressures/threats of high ("H") and of medium importance ("M"), as defined in Table 4 below, should be reported.

Table 4: Definition of ranked pressures/threats

Code	Meaning	Comment
H	High importance/impact	Important direct or immediate influence and/or acting over large areas (a pressure is the major cause or one of the major causes, if acting in combination with other pressures, of–significant decline of species population, distribution area or deterioration of habitat quality; or pressure acting over large areas preventing the species population of depleted species to expand).
M	Medium importance/impact	Medium direct or immediate influence, mainly indirect influence and/or acting over moderate part of the area/acting only regionally (other pressure not directly or immediately causing significant declines).

The impact of the pressure should reflect the influence of a pressure or threat on the status or trends of the species. Only pressures that have an important direct or immediate influence on either population size or species distribution at the country scale (causing significant decline or deterioration or preventing species from being restored, see Table 4) should be ranked as "high". However, it is likely that species with "increasing" or "stable" trends or where only very localised or slight declines were recorded will not have "high importance" pressures (unless the pressures are counteracted with measures). The maximum number of "high" ranked pressures and/or threats that can be reported is five, even if more could be considered. This, together with any other information related to pressures and threats, can be noted in field 7.3 "Additional information".

For each bird species:

a) From the list of pressures/threats, select a maximum of 10 entries for each of pressures and threats using the code at the second level of the hierarchical list. The list of pressures and threats is available on the Reference Portal[69].

[69] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

b) and d) For each pressure and threat, indicate its ranking in fields (b) and (d), i.e. **"H"** for "high", "**M"** for "medium", under both "Pressure" and "Threat". For example, if a factor selected from the list represents both a pressure and a threat, "H" or "M" should be reported under both headings as appropriate. If it represents a pressure but not a threat, "H" or "M" should be reported under the "pressure" heading and "threat" should be left blank. A maximum of five high-level pressures and five high-level threats should be noted. This will make it possible to identify the most important factors at a European scale.

c) and e) Enter the location of the pressure/threat in fields (c) and (e), i.e. where it is principally operating. Only one option should be selected. If a pressure or threat acts both inside the country, but also elsewhere choose the option corresponding to where the pressure is principally acting. For pressures acting within the country and outside the country and having approximately equal impact to national bird population report "4 = inside the country".

The codes to choose from are:

4 = inside the country
3 = elsewhere in the EU
2 = outside the EU
1 = both inside and outside the EU
x = unknown.

Table 5 provides an example of pressures and threats characterisation using a maximum of five pressures of high importance.

Table 5: An example of pressures and threats characterisation.

Characterisation of pressures/threats				
a) Pressure/threat *List a maximum of 10 pressures and a maximum of 10 threats using the code list provided on the Reference Portal*	**Pressure**		**Threat**	
	b) ranking	**c)location**	**d) ranking**	**e) location**
A14 Application of synthetic fertilisers	H	4	H	4
A22 Active abstractions from groundwater, surface water or mixed water for agriculture	M	4	-	
B05 Clear-cutting, removal of all trees	H	4	M	4
D01 Roads, paths railroads and related infrastructure (e.g. bridges, viaducts, tunnels)	H	4	H	4
D05 Electricity and communication infrastructure (e.g. phone lines, masts and antennas)	H	4	M	4
E01 Conversion from other land uses to housing and settlement areas (excl. drainage)	M	4	H	4
I02 Problematic native plants and animals	H	4	H	4

K04 Natural processes of eutrophication or acidification	-		M	4

Note that the example is only illustrative since it uses draft codes that may not be retained as such in the final list of pressures and threats.

If a country wishes to give more precise information on the nature of a certain pressure, this can be written in field 7.3 “Additional information”.

More detailed guidance on reporting pressure/threats is provided in Section “7 Main pressures and threats” (in “Definitions and methods part”)and in the notes in the list of pressures and threats available from the Reference Portal[70].

7.2 Sources of information (optional)

To provide the necessary audit trail for the data reported in field 7.1(a) above, countries can enter the details of the key references or other sources supporting evidence of pressures reported as “high”. Such sources may include, for example, published papers, unpublished data held in databases, websites and expert working groups. If the expert opinion was used it can be categorised in this field (e.g. expert opinion with partial or limited data). It is preferable to list enough information so that anyone reviewing the report (or updating it in six or 12 years' time) will be able to understand the origin of the information reported.

7.3 Additional information (optional)

If a country wishes to give additional information on certain pressure/threat (e.g. estimates of annual mortality caused by a particular pressure, for instance by illegal killing), this can be provided in this field.

8 Conservation measures

Countries are asked to describe the most important conservation measures taken for species listed in Resolution No. 6 (1998) and any other migratory species triggering ASCI designations nationally (as indicated in the species checklist) and to provide a simple assessment of the effectiveness of these measures. Countries are encouraged to provide this information for species listed in Resolution No. 6 (1998) and, if available, also for remaining species.

More information related to season-specific reporting on breeding, winter or passage species listed in Resolution No. 6 (1998) and other ASCI trigger species can be found in Table 1: Sections of the species Report format to be filled in for breeding, winter and passage season for different categories of bird speciesin Section “Field-by-field guidance for completing Bird species report”.

8.1 Status of measures

Select whether measures are needed or not. If the answer is “Yes, measures are needed”, then proceed to answer the following three questions:

a) measures identified but none yet taken? (YES/NO); or

[70] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

b) measures identified and taken? (YES/NO); or
c) measures needed but cannot be identified? (YES/NO).

Measures may be implemented at different points in time. Choose option (a) if the majority of the most important measures identified have not yet been taken; choose option (b) if the majority of the most important measures have already been or are being implemented.

8.2 Main purpose of the measures taken

Indicate the main purpose of the measures taken. This part should only be filled in if the conservation measures have been taken (field 8.1(b) "Measures identified and taken" is marked "Yes"). Even if several purposes can be identified, please indicate only the main one in terms of implementing the measures:

a) maintain the current distribution, population and/or habitat for the species;
b) expand the current distribution of the species;
c) increase the population size and/or improve population dynamics (improve reproduction success, reduce mortality, improve age/sex structure);
d) restore the habitat of the species.

8.3 Location of the measures

Indicate where the measures are mostly being implemented. This part should only be filled in if the conservation measures have been taken (field 8.1(b) "Measures identified and taken" is marked "Yes").

a) only inside the Emerald Network;
b) both inside and outside the Emerald Network;
c) only outside the Emerald Network.

This field tries to capture where the main focus of the conservation action is taking place. Therefore, choose option (a) if all, or the vast majority, of the conservation measures are restricted to Emerald, option (b) if there is a proportional investment in the implementation of measures inside and outside Emerald, and option (c) if all, or the vast majority, of the measures are taken outside Emerald.

8.4 Response to the measures

Provide an estimate of when the measures taken start, or are expected to start, to neutralise the pressure and to produce positive effects (with regard to the main purpose of the measures indicated in field 8.2). Choose one option from:

a) short-term results (within the current reporting period, 2013–2018);
b) medium-term results (within the next two reporting periods, 2019–2030);
c) long-term results (after 2030).

8.5 List of main conservation measures

List a maximum of 10 conservation measures using the code provided on the Reference Portal[71].

[71] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

More detailed guidance on the use of conservation measures is provided in Section "8 Conservation measures" (in "Definitions and methods part") and in the notes in the list of conservation measures available from the Reference Portal.

8.6 Additional information (optional)

Additional information to help understand the information given on conservation measures can be reported here.

9 Emerald Network coverage

This section is designed to capture information about the Emerald Network coverage for individual species. In order to assess the extent of coverage of the ASCI network for each relevant species at European level, countries are requested to report the size (and short-term trend) of the population that occurs within their national ASCI network.

The section should be completed for species listed in Resolution No. 6 (1998) and other migratory species triggering ASCI classifications nationally, as indicated in the species checklist on the Reference Portal[72].

More information related to season-specific reporting on breeding, winter or passage species listed in Resolution No. 6 (1998) and other ASCI trigger species can be found in 9 Emerald Network coverage in Section "Field-by-field guidance for completing Bird species report".

See background information in Section "9 Emerald Network coverage" (in "Definitions and methods part").

9.1 Population size inside the Emerald Network

Provide an estimate of the total population size included within the national ASCI network during the same year or period as reported in field 2.1 (including ASCIs where the species is known to occur, but is not classified as a qualifying interest or trigger species). See the text for field 2.2 above for details on how to complete fields (a), (b), (c) and/or (d).

In order to avoid overinflated figures, countries may need to adjust the total population size inside the Emerald Network for some mobile wintering species downwards, to allow for significant movements of individuals between ASCIs, as might apply, for instance, for various geese species wintering in north-western Europe.

9.2 Type of estimate

Select one of the following options:

- best estimate – the best available single figure (including where only the maximum value of the population size is available) or interval, derived from, for example, a population census, a compilation of figures from localities, an estimate based on population densities and distribution data, or expert opinion, but for which 95 % confidence limits have not been calculated. Whether a best estimate comes from monitoring data, extrapolation or expert opinion can be indicated in field 9.3;

[72] http://www.coe.int/en/web/bern-convention/emerald-network-reference-portal

- multi-year mean – average value (and interval) where population size has been estimated for several years during the reporting period;
- 95 % confidence interval – estimates derived from sample surveys or a model for which 95 % confidence limits could be calculated (as reported in fields 9.1(b) and 9.1(c));
- minimum – where insufficient data exist to provide even a loosely bounded population size estimate, but where a population size is known to be above certain value, or where the reported interval comes from a sample survey or monitoring project which probably underestimates the real population size.

Follow the same guidance as for field 2.3 “Type of estimate” for Population size.

9.3 Population size inside the network – Method used

Select one of the following options (analogous to field 2.4 “Method used”):

a) complete survey or a statistically robust estimate;
b) based mainly on extrapolation from a limited amount of data;
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Follow the same guidance as for field 2.4 “Method used” for Population size.

9.4 Short-term trend of population size within the network – Direction

As in field 3.1.2 “Short-term trend direction”, indicate whether the population trend in the ASCI network over the short-term trend period (as reported in field 3.1.1) was:

stable / fluctuating / increasing / decreasing / uncertain / unknown

See the text for field 3.1.2 “Short-term trend direction” for further guidance on the interpretation and use of these trend direction categories.

9.5 Short-term trend of population size within the network – Method used

Select which of the following options best describes the method used to assess the short-term trend direction (as per field 3.1.4 “Short-term trend – Method used”):

a) complete survey or a statistically robust estimate;
b) based mainly on extrapolation from a limited amount of data;
c) based mainly on expert opinion with very limited data;
d) insufficient or no data available.

Follow the same guidance as for field 3.1.4 “Short-term trend - Method used”.

9.6 Additional information (optional)

This section can be used to provide supplementary free-text information (maximum 500 characters) relevant to the data provided in fields 9.1 to 9.5.