

**Reporting under Article 17
of the Habitats Directive**

**Explanatory Notes & Guidelines
for the period 2013–2018**

EXTRACT

FIELD-BY-FIELD GUIDANCE

October 2016

Compiled by the European Environment Agency and its
European Topic Centre on Biological Diversity

NOTE

This document is an extract of the full Explanatory Notes & Guidelines. Part of the text which need to be completed or make reference to other sections of the guidelines not yet finalized are *(written in italic and in bracket)*.

CONTENTS

INTRODUCTION	5
PART 1. THE REPORTING FORMAT FIELD-BY-FIELD GUIDANCE	8
GENERAL INTRODUCTION TO AND STRUCTURE OF THE REPORT FORMAT	8
ANNEX A - GENERAL REPORT FORMAT.....	9
0 Member State	9
1 Main achievements under the Habitats Directive	9
2 General information sources on the implementation of the Habitats Directive – links to information sources of the Member State	10
3 Natura 2000 (pSCIs, SCIs & SAC) – site designation (Art. 4).....	11
4 Set of conservation measures and management plans for Natura 2000 sites (SACs) (Art. 6(1))	12
5 Measures taken in relation to approval of plans & projects (Art. 6.4)	13
6 Measures taken to ensure coherence of the Natura 2000 Network (Art 10).....	14
7 Reintroduction of Annex IV species (Art 22.a).....	14
ANNEX B - REPORT FORMAT ON THE 'MAIN RESULTS OF THE SURVEILLANCE UNDER ARTICLE 11' FOR ANNEX II, IV AND V SPECIES	15
Species to be reported.....	15
Special cases	16
Field-by-field guidance for completing 'Annex B' Species reports	20
NATIONAL LEVEL	20
1 General information.....	20
2 Maps	21
3 Information related to Annex V species (Article 14).....	22
BIOGEOGRAPHICAL REGION LEVEL.....	23
4 Biogeographical regions and marine regions.....	24
5 Range	24
6 Population.....	27
7 Habitat for the species	33
8 Main pressures and threats	35
9 Conservation measures.....	38
10 Future prospects	39
11 Conclusions	39
12 NATURA 2000 (pSCIs, SCIs and SACs) coverage for Annex II species	42
13 Complementary information	44
ANNEX D - REPORT FORMAT ON THE 'MAIN RESULTS OF THE SURVEILLANCE UNDER ARTICLE 11' FOR ANNEX I HABITAT TYPES	45
Habitats to be reported	45
Field-by-field guidance for completing 'Annex D' Habitat reports	46

- NATIONAL LEVEL 46**
 - 1 General Information 46
 - 2 Maps 46

- BIOGEOGRAPHICAL REGION LEVEL..... 48**
 - 3 Biogeographical or marine level 48
 - 4 Range 48
 - 5 Area covered by habitat..... 52
 - 6 Structure and functions 55
 - 7 Main pressures and threats 58
 - 8 Conservation measures..... 60
 - 9 Future Prospects 61
 - 10 Conclusions 62
 - 11 NATURA 2000 (pSCIs, SCIs and SACs) coverage for Annex I habitat types..... 65
 - 12 Complementary information 66

INTRODUCTION

Article 17 paragraph 1 of the Habitats Directive¹ (hereafter 'the Directive') states: 'Every six years from the date of expiry of the period laid down in Article 23, Member States shall draw up a report on the implementation of the measures taken under this Directive. This report shall include in particular information concerning the conservation measures referred to in Article 6 (1) as well as evaluation of the impact of those measures on the conservation status of the natural habitat types of Annex I and the species in Annex II and the main results of the surveillance referred to in Article 11.'

Article 17 paragraph 2 provides for the European Commission to prepare a composite report based on the national reports and to make it available for the other EU institutions and the public in general.

The first report in 2000 focused on the legal transposition and general implementation of the Directive; the second and third reports from the Member States in 2007 and 2013 (covering the periods 2001-2006 and 2007-2012 respectively) were focused on the Conservation Status of the habitat types and species included in the annexes the Directive.

Reporting under Article 17 of the EU Habitats Directive uses a format approved by Member States representatives as part of the Habitats Committee after discussion and consultation in the Expert Group on the Birds and the Habitats Directives (NADEG). The **report format aims at standardise and harmonise the content of the reports across Member States** to allow the aggregation of national data to produce the EU report. After each reporting period, a revision of the formats is undertaken by DG Environment, European Environment Agency and its European Topic Centre on Biological Diversity in collaboration with the Member States. The Expert Group on Reporting under the Nature Directives – which also include representatives of stakeholders – is tasked with proposing and discussing the improvement and modification of the formats and the guidelines published in 2006 and 2011. In order to help this process several Ad hoc groups were set up in order to facilitate a harmonised understanding between Member States using scientific and pragmatic approaches.

The format was initially approved by the Habitats Committee in 2003² and first used for the period 2001-06. Experience gained during that report led to some changes for the report for 2007-2012, in particular, sections were added to help assess the role of the Natura 2000 network in reaching the goals of the directive. Further experience with the 2007-2012 reports has led to further changes, some of these aim to simplify the report. The major additions are questions on the nature of changes aimed to help measure progress towards the targets in the EU's 2020 Biodiversity Strategy and for information on the exploitation of Annex V species.

¹ Council Directive 92/43/EEC

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:01992L0043-20070101:EN:NOT>

² DocHab 04-03/03-rev3

How to use these Explanatory Notes & Guidelines

These guidelines are aimed primarily at those responsible for compiling the national Article 17 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 organized 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.

Technical documents and reference lists

The Reference Portal³ contains documents and material related to the information provided in the reporting formats under Article 17 of the Habitats Directive.

It includes:

- the Reporting formats 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 of pSCIs, SCIs and SACs, agreed population units, list of pressures and threats, list of conservation measures and the European grids (10x10km² ETRS) used for mapping the distribution and range.

Content of the Article 17 report

The reports under Article 17 of the Habitats Directive provide information on the conservation status habitats and species listed in the annexes to the directive. **Conservation Status is the overall assessment of the status of a habitat type or a species at the scale of a Member State' biogeographical or marine region.**

Favourable Conservation Status (FCS)

The assessment of the Conservation Status of a habitat type or species is related to the concept of the Favourable Conservation Status (FCS). FCS is the overall objective to be reached for all habitat types and species of community interest (i.e. the habitats and species listed in annexes I, II, IV & V of the directive) and it is defined in Article 1 of the Habitats Directive. In simple words it can be 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 directive is defined in positive terms, 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 for species in the Habitats Directive (Article 1i) will be take 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*

³ http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019

- *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; (Article 1i)*

Parameters

Favourable Conservation Status is defined in Article 1 of the Directive by four parameters for each habitat type and species (see above). For the species, the parameters require information on their distribution, their viability, their ecological condition and their future Prospects.

The agreed method for the evaluation of Conservation Status assesses each of the parameters separately, 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. The parameters, which are discussed in more detail below, are:

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	Structures and functions
Future Prospects	Future Prospects

HOW IS THE INFORMATION ON CONSERVATION STATUS USED?

Regular reporting using an agreed format is an obligation under Article 17 of the European Union’s Habitats Directive, it is essential that the reports from the Member States are harmonised otherwise it is not possible to aggregate reports to produce a Composite Report for the EU as required by the Directive.

Evaluation of the EU biodiversity strategy

The reports give an overview of the state of the EU’s biodiversity and form an important component of evaluating EU policies, in particular in measuring progress towards the 2020 targets set under the EU biodiversity strategy. Results from the 2007–2012 reporting period are described in ‘State of nature in the EU’ (EEA, 2015).

Link with other biodiversity assessments

The EU Water Framework and Marine Strategy Framework Directives use the terms ‘Good Ecological Status’ and ‘Good Environmental Status’, respectively, which are broadly comparable to FCS. However their definitions are different and they assess different aspects of biodiversity (see Cochrane *et al.* (2010) for further information). Clearly in many instances the same data will be used for reporting under two or more directives and Member States are encouraged to develop links between work for reporting under all three directives. Work is also ongoing at EU-level to ensure synergies in definition of the various concepts.

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

GENERAL INTRODUCTION TO AND STRUCTURE OF THE REPORT FORMAT

The Article 17 report format consists of five distinct Annexes (A–E) as set out in these Explanatory Notes & Guidelines for the period 2013–2018.

Annex A (General report) – The general report gives overview information on the implementation and general measures taken under the Habitats Directive.
Annex B (Species reports) – Species conservation status reporting. Field-by-field guidance is provided for completing the main results of the surveillance under Article 11 for Annex II, IV and V species.
Annex C (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 (i.e. for each parameter and the overall assessment) for each species are also reported in the respective Annex B report.
Annex D (Habitat type reports) – Habitat type conservation status reporting. Field-by-field guidance is provided for completing the main results of the surveillance under Article 11 for Annex I habitat types
Annex E (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.

The information reported in the Annexes B and D reports includes data used to undertake the assessment of conservation status and will be essential for the further assessment of conservation status across each biogeographical or marine region and/or across the EU. Therefore, the habitat type and species reporting formats both have a short ‘national’ section to be completed for each habitat type or species of Community interest present in the Member State, followed by a ‘biogeographical or marine region’ section. This should be completed for each biogeographical or marine region in the Member States where the habitat type or species is present according with the checklists in the Reference Portal.

ANNEX A - GENERAL REPORT FORMAT

Field-by-field guidance for completing the general report

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 Directive, including links to more detailed information sources. It is mainly targeted at the interested public, but also at informing the Commission.

Each Member State is expected to submit one general report covering entire European territory of a Member State. It includes obligatory information about several provisions of the Habitats Directive. In addition, the main achievements under the implementation of the Directive and the main measures taken to ensure the coherence of the Natura 2000 network should be briefly described. The report should give information of relevance for the period 2013–2018.

Please note that information given (e.g. number of sites) should be as close as possible to 31 December 2018, i.e. at the end of the reporting cycle, unless otherwise stated.

Language – any EU official language can be used. The report format tries to minimise the difficulties of using different languages by requesting numerical information wherever possible. The use of English is recommended.

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

NB: The titles in **bold** below correspond to the numbering and naming of the fields in the report format.

0 Member State

Select the two-digit code for your Member State from ISO 3166. For the United Kingdom, use 'UK' instead of 'GB', in accordance with the list to be found on the Article 17 Reference Portal⁴.

1 Main achievements under the Habitats Directive

This section aims to inform the interested public about the main achievements under the Habitats Directive and the Natura 2000 network in the respective Member State during the reporting period. The information should primarily be given in the national language (field 1.1), plus a translation into English if possible (field 1.2), as this information is likely to be of interest to readers in other Member States.

1.1 Text in national language

Describe briefly the main achievements under the Habitats Directive during the reporting period, with a special emphasis on the Natura 2000 network. This can include, for example:

- demonstrated benefits for different habitat types and species
- experiences with new or improved management techniques
- positive changes in public acceptance of biodiversity protection

⁴ http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019

- improved cooperation between authorities, nature conservationists and other interest groups
- initiatives to combine establishment of Natura 2000 sites and the local economy.

The text should be kept to a maximum of two pages. If a Member State wishes to add further documentation to that requested, it should note these Annexes and their file names 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.

1.2 Translation into English

This is an optional field to translate the information provided in the field 2.1 into English (in case it was reported in another language).

2 General information sources on the implementation of the Habitats Directive – links to information sources of the Member State

This section aims to inform the interested public where they can find information relating to the Habitats Directive and the Natura 2000 network from the respective Member State. 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.

2.1 General information on the Habitats Directive

Provide links to general information on the Habitats Directive (e.g. portal presenting EU nature directives)

2.2 Information on the network of pSCIs, SCIs and SACs

Provide links to general information on the network of pSCIs, SCIs and SACs (e.g. an online databases of Natura 2000 sites, publications presenting the network)

2.3 Monitoring schemes (Art. 11)

Provide links to general information on the monitoring (e.g. portal presenting national monitoring system(s))

2.4 Protection of species (Art. 12-16)

Provide links to general information on the species protection

2.5 Impact of measures referred to in the Art. 6.1 on the conservation status of Annex I habitats and Annex II species (Art. 17.1)

Provide links to general information on the implementation of conservation measures within the Natura 2000 sites and their impact on conservation status.

2.6 Transposition of the Directive (legal texts)

Provide links to general information on transposition of the Directive.

3 Natura 2000 (pSCIs, SCIs & SAC) – site designation (Art. 4)

Member States should provide information at the national level on the numbers and surface area of Proposed Sites for Community Importance (pSCIs), Sites for Community Importance (SCIs) and Special Areas of Conservation (SACs).

3.1 All sites

Provide the total number and surface area of pSCIs, SCIs and SACs and separately the number and surface area of SACs

3.2 Terrestrial area of sites

Provide the terrestrial surface area of pSCIs, SCIs and SACs and separately the terrestrial surface area of SACs.

3.3 Marine sites

Provide the total number and marine surface area of marine pSCIs, SCIs and SACs and separately the number and marine surface area of marine SACs

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 international⁵ or national⁶ legislation. This approach is the same as that adopted for the Standard Data Forms (SDFs) for individual Natura 2000 sites. Thus, a site located at the coastline and stretching out into the sea should be counted as a 'marine site', although it might include a terrestrial component (to be included in the figure to be reported in field 3.1.1) as well as a marine component (to be included in the figure to be reported in field 3.1.2; see map Figure 1).

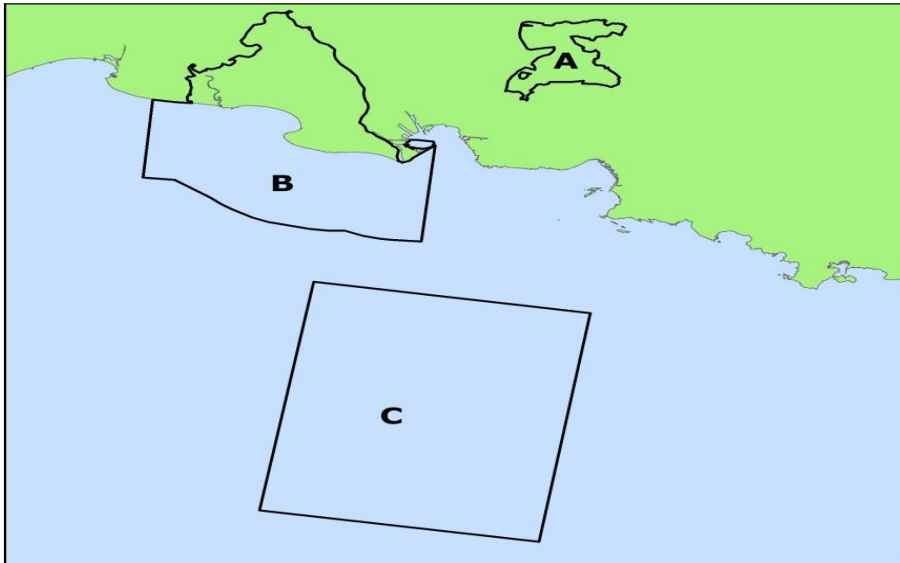
Terrestrial area of sites is any area of a site which is not marine (as defined above). In the reporting format the terrestrial area of sites in km² (field 3.1.1) plus the area of marine sites in km² (field 3.1.2) together should give the total area of all sites (field 3.1).

Member States are also asked to give the date when the Natura 2000 database used to provide the information in section 3 was submitted to the Commission (field 3.2).

⁵ UN Convention on the Law of Sea (UNCLOS).

⁶ http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019

Figure 1. Examples of terrestrial and marine Natura 2000 sites. (Figure 1 to be updated)



Note: A is a terrestrial site (the site is located in the terrestrial domain only). B is located in a coastal area, and should be counted as a marine site. This consists of both terrestrial (green) and marine areas (blue), to be reported in fields 3.1.1 and 3.1.2, respectively. C is a marine site and is located in the marine domain only.

3.4 Date of database used

This is normally the date of the FINAL database submitted (uploaded to CDR) during the reporting period (2013–2018), however it is understood that occasionally later sources are used to fill in information under this section, e.g. to provide the number of SACs if some of them were designated after the database submission. Please supply this information in DD/MM/YYYY format.

4 Set of conservation measures and management plans for Natura 2000 sites (SACs) (Art. 6(1))

'Conservation measures and management plans' are considered as operational instruments that outline practical measures to achieve the conservation objectives for the sites in the network. For this purpose, only Natura 2000 sites having conservation measures and management plans covering an entire Natura 2000 site (or sites) and all habitat types and species for which the site is designated and fulfilling the following minimum requirements should be reported. They should:

- indicate the habitat types and/or species and their localities for which conservation measures are 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.

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

4.1 Necessary conservation measures have been established according to Art.6(1) and are applied

Give the number of sites and the proportion of the network within the Member State for which necessary conservation measures and management plans have been established (i.e. that there exists a statutory, administrative or contractual framework and that the measures are being enforced).

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 within the Member State for which conservation measures have been set out in a comprehensive management plan or a similar instrument (field 4.2). 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. To put this number in context, the proportion of the network area that is covered by such plans is also requested.

5 Measures taken in relation to approval of plans & projects (Art. 6.4)

This section concerns projects and plans for which compensatory measures were necessary during the reporting period. Any sites affected in this way should be reported under this section. Repeat fields as necessary for each project/plan⁷.

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 project/plan (or projects/plans if one site is concerned by more projects).

5.4 Year Commission was informed of compensatory measures

Provide the year when Commission was informed about compensatory measures.

5.5 Year project/plan was started

Provide the year project/plan was started.

⁷ Further guidance on Article 6 may be found at DG Environment's website (e.g. the document 'Managing NATURA 2000 sites - The provisions of Article 6 of the 'Habitats' Directive 92/43/EEC' published by DG Environment in 12 EU languages)

http://ec.europa.eu/environment/nature/natura2000/management/guidance_en.htm#art6

5.6 Commission opinion requested?

Indicate whether a Commission opinion was requested ('yes/no' in field 5.6).

5.7 Impact of projects requiring compensatory measures on conservation status

Describe the impact of such projects/plans on conservation status of habitat types and species (free text, maximum 250 characters).

6 Measures taken to ensure coherence of the Natura 2000 Network (Art 10)

This section is for a general description of the main measures taken to ensure the coherence of the Natura 2000 network according to Article 10 of the Habitats Directive. Give an overview at national level of activities 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.

(Examples to be provided)

7 Reintroduction of Annex IV species (Art 22.a)

For each species give:

Repeat fields 7.1.1 to 7.5 for each species as needed.

7.1 Species code

Provide the species code as given in the species checklist on the Reference Portal (fields 7.1 and 7.2).

7.2 Species scientific name

Provide the species scientific (Latin) name, as given in the species checklist on the Reference Portal.

7.3 Alternative species scientific name

Provide an alternative scientific name (synonym) (optional).

7.4 Common name

Provide a common name in national language or English (optional).

7.5 Reintroduction period

Provide a reintroduction period.

7.6 Reintroduction location and number of individuals reintroduced

Provide reintroduction location and number of individuals reintroduced (a) Location, b) Number of individuals).

7.7 Is the reintroduction successful?

Indicate whether the reintroduction has been successful ('yes/no/Too early to say'). A successful reintroduction implies natural reproduction has already taken place and the population is growing (field 7.7).

If the species is considered 'sensitive' (see 2 Maps in Section II.3 below), adjust the information on the location accordingly.

7.8 Additional information on the reintroduction

Additional information on the reintroduction can be given in this optional free text field

ANNEX B - REPORT FORMAT ON THE 'MAIN RESULTS OF THE SURVEILLANCE UNDER ARTICLE 11' FOR ANNEX II, IV AND V SPECIES

Species to be reported

In general, each Member State should report (either a full or a partial report) all species listed in Annexes II, IV and V of the Habitats Directive for every biogeographical or marine region in which they occur (see also next paragraph) . The report is optional for species with a scientific reserve. A checklist of species covered by the Habitats Directive and their occurrence per biogeographical or marine region and Member State will be made available from the Article 17 Reference Portal⁸.

Taxonomic splits and changes in names

Since the original Annexes of the Habitats Directive were published in 1992, there have been taxonomic revisions of several of the taxa listed. As a result, some of taxa listed as a species in the Directive are now considered to be two or more species. In general, wherever feasible (e.g. the species can be determined in the field), there should be one Article 17 report for each currently recognised species. For example, the Directive lists *Euproctus asper*, but following a taxonomic revision this is now considered to be two species, under a different genus name, i.e. *Calotriton asper* and *Calotriton arnoldi*, and there should be a report for each of these taxa – as indicated in the species checklist.

There have also been changes in names and several names used in the directive are no longer considered valid by taxonomists. The species checklist indicates which name should be used ('recommended name').

For some species the taxonomy remains unclear or was ambiguous in the time the Annexes of the Directive were drafted. For these species the link between the currently recognized valid names and the names listed in the Directive is not implicit. Other species listed in the Directive are currently considered as taxonomical errors. These situations are highlighted in the species checklist. The overview of the taxonomy related categories used in the species checklist with indication of whether a reports is expected or not is provided in the Table 1.

Table 1: Report and taxonomical issues

Species category	Report
Taxonomical uncertainty The taxonomy of the species remains unclear or was ambiguous in the time the Annexes of the Directive were drafted.	Mandatory
Taxonomical error Species listed in the Directive is currently proven as a taxonomical error	No report

⁸http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019

Special cases

Species with marginal or irregular occurrence, extinct species.

In some situation it is impossible to provide a complete assessment of the conservation status using the methods outlined in the evaluation matrix and this guidelines document. This is particularly a case of irregularly occurring or marginal species, the conservation status of which depends on the status of neighbouring main population, or of the extinct species. To reflect the specificity of reporting in these situations the species checklist distinguishes several categories of species (technically speaking several categories of species occurrence). In general, for these categories it is often not necessary (not possible) to fill in a complete report. The overview of the categories with indication of whether a reports is expected and which parts of the report remain mandatory is provided in the Table 2, short definition of species categories is below the table. More detailed definition of species categories can be found in Section (*Reference to be updated*).

Table 2: categories occurrence of species within the biogeographical/marine region and indication of the expected content of the Article 17 report

Species category	Report	Information which is mandatory to report
Present regularly (PRE)	Mandatory	Full report
Occasional (OCC)	Mandatory partial report	Whenever possible: <ul style="list-style-type: none"> • actual range – surface area (field 5.1); • population – size estimate (fields 6.1 or 6.2), date (field 6.3) and method used (field 6.4). • 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: <ul style="list-style-type: none"> • actual range – surface area (field 5.1); • population – size estimate (fields 6.1 or 6.2), date (field 6.3) and method used (field 6.4). • any other relevant information, e.g. information related to the potential range expansion or an explanation why a species is treated as a newly arriving species in (field 13.3)
Marginal (MAR)	Mandatory partial report	Whenever possible: <ul style="list-style-type: none"> • actual range – surface area (field 5.1); • population – size estimate (fields 6.1 or 6.2), date (field 6.3) and method used (field 6.4). • an information on occurrence of main population (field 13.3)
Species extinct after entry into force of the Habitats Directive (EXa)	Mandatory	<ul style="list-style-type: none"> • section 11 Conclusions. The overall conservation status is unfavourable bad
Species extinct prior to entry into force of the Habitats Directive (EXp)	Mandatory for species where restoration project is on-going or if the species is of particular interest and its recolonization is possible or has already started	Whenever possible: <ul style="list-style-type: none"> • actual range – surface area (field 5.1); • population – size estimate (fields 6.1 or 6.2), date (field 6.3) and method used (field 6.4). • any other relevant information, e.g information on re-introduction project or information related to recolonization (field 13.3)
Scientific reserve (SR)	Optional	<ul style="list-style-type: none"> • any other relevant information, e.g information on survey conducted or related to probability that the species will/won't be refound in the region (field 13.3)

Short definition of species categories:

- **Present regularly (PRE)**

The species which occurs regularly in the region. A full report is mandatory⁹.

- **Occasional (OCC)**

Occasional species (OCC) are species which do not have a stable and regular occurrence in the biogeographical/marine region and for which the number of specimens is insignificant. Reproduction within a biogeographical region or marine region is not recorded or is very sporadic.

- **Newly arriving species (ARR)**

Newly arriving species are species that do not represent a permanent component of the fauna or flora of a biogeographical/marine region, but which have started to be recorded recently within the region (within last 12 years).

- **Marginal (MAR)**

Species of marginal occurrence, i.e. principally in one region (or Member State) with population extending to a neighbouring region (or Member State), where the abundance of a species is insignificant. Marginal populations are closely connected to the main population occurring in the neighbouring region or Member State (for example immigration of individuals) so their favourable status can be achieved only in relation with the main population.

- **Species extinct after entry into force of the Habitats Directive (EXa)**

Species which became extinct (in a biogeographical or marine region) after the Habitats Directive came into force in the Member State. This category includes species for which the last record (even if it was a single individual) was noted after the date when the Directive came into force in the Member State; these species previously had a permanent/regular occurrence in the region. This category also applies for species for which (the last/the only) reproducing population within the region became extinct after the Directive came into force but which still occur as vagrant or occasional (vagrant individuals from populations in neighbouring countries/regions are present).

- **Species extinct prior to entry into force of the Habitats Directive (EXp)**

Species which became extinct (in a biogeographical or marine region) prior to the Habitats Directive coming into force in the Member State but after 1950. This category includes species which had previously stable occurrence in the region and for which the last record (even if it was a single individual) was before the date when the Directive came into force.

- **Scientific reserve (SR)**

The occurrence of the species is uncertain. This category applies when there are only occasional historical records and it is not possible to judge whether it occurs in the region regularly in significant numbers.

⁹ The species or habitat types which do not occur in the area of Cyprus where the Community acquis applies at present no report is expected but the species should remain in the checklist

Reporting for species groups

The Annexes include several species groups, for example Annex II has ‘*Alosa* spp.’ while Annex IV has ‘Microchiroptera – All species’. All species included in these groups should be reported separately, except *Cladonia* subgenus *Cladina*, *Lycopodium* and *Sphagnum*. For example, there should be separate reports per region for *Alosa agone*, *A. alosa*, *A. fallax*, *A. killarnensis*, etc. For Annex V ‘*Acipenseridae* – All species not mentioned in Annex IV’, reports should be produced for *Acipenser gueldenstaedtii*, *A ruthenus*, *Huso huso*, etc. The species to be included under each group are shown in the species checklist available from the Article 17 reporting Reference Portal¹⁰.

For *Cladonia* subgenus *Cladina*, *Lycopodium* spp. and *Sphagnum* spp. Member States should submit a single report per group per region. It is also possible to report individual species in those groups (where it is thought that a species needs special attention), but in this case they should also be included in the report on the genus. For example, if Germany considers that *Sphagnum pulchrum* in the Atlantic region is of special concern, it can submit a report for that species. However, the overall assessment for *Sphagnum* spp. for the region should also take *Sphagnum pulchrum* into account.

If a Member State wishes to give information on population size, either for the group or an individual species, they should use the unit from the agreed list for the group.

For these three species groups, a report giving only the overall assessment of conservation status and its trend (fields 10.6 and 10.7 of Annex B) is acceptable and no maps of range or distribution are required. As it may be difficult to conclude the overall assessment if there are species with different conservation status, the Member State should explain the variation in field 9.2 ‘Other relevant information’.

Box 1: Species to be included in *Cladonia*, *Lycopodium* & *Sphagnum*

Cladonia subgenus *Cladina* – All European species in the subgenus according to Ahti (1961 and pers. comm.): *Cladonia arbuscula* (incl. *Cl. mitis* and *Cl. squarrosa*), *Cl. ciliata* (incl. *Cl. tenuis*), *Cl. conspicua*, *Cl. portentosa* (*Cl. implexa*), *Cl. rangiferina*, *Cl. stellaris* (*Cl. alpestris*), *Cl. stygia*, *Cl. azorica*, *Cl. macaronesica* and *Cl. Mediterranea*.

Lycopodium – Listing in Annex V relates to commercial exploitation and commerce is not limited to the genus *Lycopodium*. For Article 17 reporting *Lycopodium* should be interpreted as all species in the family *Lycopodiaceae* (following *Flora Europaea*, see Appendix 2).

Sphagnum – All species in the genera *Sphagnum* except *Sphagnum pylasii* (Annex II & IV).

More guidance is provided in the Section related to concepts.

Geographical exceptions from the Annexes of the Directive

A report should be submitted even if a Member State has an exception from all annexes where the species is listed. The geographical restriction for one or more Annexes concerns only the protection (as defined for the relevant Annex) of a given species, in a given Member State. The species is nevertheless a species of Community interest according to Articles 1 and 2. It should be noted that this legal interpretation is also justified in technical terms by the fact that the Commission, in order to understand and assess the EU-wide / biogeographical situation of such species needs information

¹⁰ http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019

on the status of the species in all EU-territory (including the territory of the Member States with geographical restrictions).

Hybrid populations

If hybrids between two Annex II species occur, then the hybrid population(s) should be taken into account in the reports of both of the Annex II species concerned. If a hybrid is between an Annex II species and a native but non-Annex II species, then it is a case-by-case reporting. If a hybrid is between an Annex II species and an alien species, the report should not cover the hybrid, but where appropriate this should be noted as a threat or pressure.

Field-by-field guidance for completing 'Annex B' Species reports

NB: To be completed for each Annex II, IV & V species present¹¹.

Specify the parts which should only be provided only for a group of the species (section 3, 9 and 12).

It is recommended that the free text information in the different fields is written in English to facilitate the further use of information in the EU analysis and to allow a wider readership.

NATIONAL LEVEL

The following information to be provided at the national level:

1 General information

The following information should be provided for each species, as well as for species from groups (e.g. *Alosa* spp., and all species of Microchiroptera).

1.1 Member State

Select the two-digit code for your Member State from ISO 3166. For the United Kingdom, use 'UK' instead of 'GB', in accordance with the list to be found on the Reference Portal.

1.2 Species code

Use codes (four-character sequential code) as given in the species checklist available on the Reference Portal. The Natura 2000 codes are also used in the Standard Data Form (SDF) for individual Natura 2000 sites so that a consistent and unique identifier is used across the different reporting periods – new codes will be allocated as necessary to ensure that all species are covered.

1.3 Species scientific name

As given in the species checklist available on the Reference Portal.

In addition, the following optional information can be provided:

1.4 Alternative species scientific name

The scientific name used at the national level if it differs from the name in field 1.3. Similarly, if the name of a species used in the Annexes of the Habitats Directive differs from that in the complete

¹¹ A checklist of species thought to be present in each Member State for which a report is expected will be available at http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019/

species checklist on the Reference Portal, e.g. due to recent taxonomic changes, then the alternative name may be entered here.

1.5 Common name

Indicate the common name as used in the national language.

2 Maps

This section contains information on maps to be submitted together with the tabular information as a part of the Article 17 report. Apart from mandatory distribution map also other kind of maps with information relevant for understanding the assessment of conservation status can be provided.

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 is reported according to the specifications in the field 2.3 is considered 'sensitive', this can be indicated by entering 'yes' in this field.

If a species is marked as sensitive, the Commission and 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

Year or period when the actual distribution data were collected. Use the following formats: YYYY (for year) and YYYY–YYYY (for period, year–year).

(Limits for use of the old data to be defined)

2.3 Distribution map

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

10x10 km ETRS89 grid, projection ETRS LAEA 5210¹²

The distribution map should provide information about the actual occurrences of the species, which should be based on the results of a comprehensive national mapping or inventory of the species wherever possible.

The distribution map will consist of 10 x 10 km ETRS 89 grid cells in the ETRS LAEA 52 10 projection¹³. The gridded dataset will consist 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 was collected should be included in the metadata following the INSPIRE guidelines.

¹² For small Member States such as Luxembourg, Malta and Cyprus, maps of 5x5 km or 1x1 km grids are allowed. These will then be aggregated by ETC/BD to 10x10 km for visualisation at the European level.

¹³ European Terrestrial Reference System 1989 Lambert Azimuthal Equal Area Latitude of origin 52 N, Longitude of origin (central meridian) 10°E. <http://www.eionet.europa.eu/gis>

In some exceptional cases such as widely ranging but poorly known cetacean distribution, it may be relevant to submit maps of 50 x 50 km.

The grids for individual Member States are available for download from the EEA website; <http://www.eea.europa.eu/data-and-maps/data/eea-reference-grids-2>.

2.4 Method used

Use one of the following categories to define the method used for the distribution map:

- 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, indicate the category for the most important source of data.

2.5 Additional maps (optional)

Member States may also submit additional maps, for example giving more detailed distribution data (e.g. at higher resolution) or a range map (see section 5 below). 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 10x10 km or with grids other than the ETRS89 LAEA5210 grid, or close to the 10x10 km, may be reported here.

3 Information related to Annex V species (Article 14)

Annex V lists species whose taking in the wild and exploitation may be subject to management measures, this section aims to identify which Annex V species that are not at Favourable Conservation Status are taken or exploited and which, if any, relevant conservation measures are being implemented.

3.1 Is the species taken in the wild/exploited?

Indicate whether the species is taken in the wild or exploited.

The remaining fields in this section are only filled in if the response is 'yes' and the conservation status of the species is Unfavourable (U1 or U2) in at least one biogeographical or marine region where the species occurs. Complete fields 3.2 to 3.4 in this case.

3.2 Which of the measures in Article 14 have been taken?

For species taken in the wild/exploited, indicate if any of the measures noted in Article 14 of the Directive have been taken. This information is only requested for species that are **not** in Favourable status (as reported in field 11.5 Overall assessment of conservation status) for one or more regions.

- a) regulations regarding access to property
- b) temporary or local prohibition on the taking of specimens in the wild and exploitation

- c) regulation of the periods and/or methods of taking specimens
- d) application of hunting and fishing rules which take account of the conservation of such populations
- e) establishment of a system of licences for taking specimens or of quotas.
- f) regulation of the purchase, sale, offering for sale, keeping for sale or transport for sale of specimens
- g) breeding in captivity of animal species as well as artificial propagation of plant species
- h) other; in this case please describe the measure(s).

3.3 Hunting bag or quantity taken in the wild for mammals and *Acipenseridae* (fish)

Provide information on the hunting bag or quantity taken in the wild. If relevant, use the same population units as in field 6.2 'Population size'. This data is provided per year/season over the length of the reporting period. For species with defined hunting seasons report per season (if national counts are also done per season). Season 1 is 2012/2013 (starting in autumn 2012 and ending in spring 2013). Season 6 is 2017/2018. For species which do not have the hunting seasons or where national counts are elaborated per year (e.g. sturgeons) provide counts per calendar year; year 1 is 2013 and year 6 is 2018.

The raw data should be provided for the hunting bag or quantity taken and where an exact number is known this should be filled in both under the Min. and Max. fields. Where the hunting bag is unknown this should be indicated in a separate field.

3.4 Method used

Use this field to provide information on the methods used to quantify the hunting bag or quantity taken in the wild reported at 3.3. Choose one of following methods;

- a) Complete survey or a statistically robust estimate (*Examples to be provided*)
- b) Based mainly on extrapolation from a limited amount of data (*Examples to be provided*)
- 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, indicate the category for the most important source of data.

3.5 Additional information (optional)

This field is optional and allows Member States to report as free text any information which is felt relevant such as for instance the regulation in force for the considered species in the country.

BIOGEOGRAPHICAL REGION 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 Member State, three separate reports are required.

Reports are expected for each biogeographical or marine region for which the species is listed in the species checklist (see Sections Species to be reported and 'Occurrence categories used in the species checklist').

4 Biogeographical regions and marine regions

4.1 Biogeographical or marine regions where the species occurs

Biogeographical region or marine region concerned within the Member State.

- Use the following names for biogeographical regions (Table 3):

Table 3: Biogeographical region		
Alpine	Boreal	Macaronesian
Atlantic	Continental	Pannonian
Black Sea	Mediterranean	Steppic

- Use the following names for marine regions (Table 4):

Table 4: Marine regions		
Marine Atlantic	Marine Black Sea	Marine Mediterranean
Marine Macaronesian	Marine Baltic	

Images and limits of bioregions can be found on reference portal.

4.2 Sources of information

For information from published sources related to sections 5-7 (including the published sources related to distribution maps, on which the range calculation is based upon) and sections 9-13, provide bibliographic references or links to 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://', if applicable.

5 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. The standardised process consists of 2 steps:

- 1 Creating envelope(s) around distribution grids. Range should exclude major discontinuities that are natural i.e. caused by ecological factors. A discontinuity of at least 40–50 km is suggested to be considered as a gap in the range
- 2 Fitting the envelope(s) to territorial and environmental constraints.

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 at field 2.5 (Additional maps).

Complementary information and methods for range calculation can be found in Section (*Reference to be updated*)

5.1 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 km x 10 km) which occur entirely or partly within the region. In general the surface area is provided in 10 x 10 km² resolution and the minimum area should be 100 km². For localised species with very small range it is possible to report range using finer resolution for example range is the area of a locality where species occurs, which can be several square meters. Decimals are allowed, as the range of some species can be very small.

For the estimation of the surface area the method described in Section (*Reference to be updated*) is recommended.

5.2 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 (*Reference to be updated*).

5.3 Short-term trend – direction

Trend is a (measure of a) directional change of a parameter over time. The range trend informs on changes in overall extend of species distribution. Although rare in case of range the 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 5.2 was:

- 0 = stable
- + = increasing
- - = decreasing
- u = uncertain
- x = unknown.

Report 'uncertain' if some data is available but it is not enough to accurately determine direction. Use 'unknown' where there is 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 5.12 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 a trend. This apparent change should be indicated in field 5.11 'Change and reason for change in surface area of range', and the trend should be reported as 'unknown', unless other information also clearly shows a trend.

Further guidance is given in Section (*Reference to be updated*).

5.4 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 5.2. 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’ (fields 5.4 a and b).

5.5 Short-term trend – method used

Use one of the following categories to indicate how the short-term trend was established

- 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 populations with good statistical power)
- b) Based mainly on extrapolation from a limited amount of data (e.g. trends derived from data collected on other purpose like volunteer occurrence data or on data collected only from a part of geographical range of a species, or trends based on measuring some other predictors of species distribution, like landcover 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, indicate the category for the most important source of data.

5.6 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 5.7 and 5.8, is optional.

For guidance in filling in field **5.7 ‘Long-term trend direction’**, **5.8 ‘Long-term trend magnitude’**, and **5.9 Long-term trend method used** see fields 5.3 to 5.5 (short-term trends).

Further guidance is given in Section (*Reference to be updated*).

5.10 Favourable reference range

Favourable reference range is a range within which all significant ecological variations of the habitat/species are included for a given biogeographical region and which is sufficiently large to allow the long term survival of the habitat/species. The information on the surface area of this hypothetical range is needed to evaluate conservation status using the matrix in the Annex C.

The favourable reference range is the range required for the species to be at favourable conservation status (FCS). Information on a), or b) or c) and d) 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 reference value (free text field)

The use of operators should help to reduce the use of ‘unknown’ to a minimum;

- If an operator is used, then there is no need to insert a value in field 5.10 a) otherwise the value reported must be the same as that of the actual value reported (field 5.1 Surface area)
- If the value reported for an FRR differs from the value reported in field 5.1, no operator should be used.

Where the reference value has changed in comparison to the previous reporting period, this should be explained in field 5.12 'Additional Information'.

Favourable Reference Values and use of operators are discussed in more detail in Section (*Reference to be updated*).

5.11 Change and reason for change in surface area range

To avoid potential misinterpretation and to clarify potential differences in range surface area between reporting rounds. This field allows the Member states to report on whether there are differences in the surface and if yes to report on the nature of those differences;

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

Only the main reason for change should be reported. The change is mainly due to (select one of the reasons above):

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

If a Member State wishes to give further information (e.g. cases where range surface does not change, but its borders are moving, or fragmentation of range), this can be done in field 5.12 Additional information.

5.12 Additional information (optional)

Additional information to help understand the information given on range can be reported here. (*Examples to be provided*).

6 Population

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

6.1 Year or period

Year or period when the actual distribution data were collected. Use the following formats: YYYY (for year) and YYYY–YYYY (for period, year–year).

(*Limits for use of the old data should be defined*)

6.2 Population size (in reporting unit)

This field refers to the total population in the biogeographical region or marine region of the Member State concerned. This is to be provided in the reporting unit: for all species, **except species restricted to a single country**, the population size will be **reported using either individuals or number of occupied 1x1 km grids** according to Table 5: Population units for each species group. This means that, while, for the assessment of conservation status at national level, Member States 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 this field and to be later used for EU biogeographical assessments. More guidance in Section (*Reference to be updated*).

Table 5: Population units for each species group

Species group	Individuals	Grids	Comments
Amphibians			
All amphibians		X	
Arthropods			
All Arthropods		X	
Fish			
<i>Acipenseridae</i> (sturgeons)	X		
All other fish		X	
Mammals			
<i>Microchiroptera</i> (Bats) forming large colonies in underground habitats over the majority of their natural range	X		All <i>Rhinolophidae</i> and <i>Miniopteridae</i>
All other <i>Microchiroptera</i> (Bats)		X	All <i>Microchiroptera</i> except <i>Rhinolophidae</i> and <i>Miniopteridae</i>
<i>Soricidae</i> , <i>Gliridae</i> , <i>Mustelidae</i>		X	All <i>Gliridae</i> except <i>Glis glis</i> and <i>Eliomys quercinus</i>
All others mammals	X		
Molluscs			
All molluscs		X	
Reptiles			
Marine turtles	X		
All other reptiles		X	
Other invertebrates			
<i>Centrostephanus longispinus</i> , <i>Corallium rubrum</i> , <i>Hirudo medicinalis</i>		X	
Plants			
Aquatic Vascular plants See Table 2		X	
Vascular plants species listed in Annex V of the Habitat Directive See Table 3		X	
Vascular plants which are difficult to access for survey See Table 4		X	
All other vascular plants	X		Reporting individual parameters for genus <i>Lycopodium</i> is optional
Bryophytes		X	Reporting individual parameters for <i>Sphagnum</i> other than <i>S. pylaesii</i> is optional
Lichens		X	Reporting individual parameters for <i>Cladonia</i> subgenus <i>Cladina</i> is optional

Species group	Individuals	Grids	Comments
Algae <i>Lithothamnium coralloides</i> , <i>Phymatholithon calcareum</i>		X	

For species occurring only in one Member State, a reporting unit harmonised across all the Member States is not required so the Member State can decide which reporting unit to use. If different unit than the one indicated in Table 5 is used for the assessment the Member State should assure, that it can capture trends and is biologically suitable for expressing the favourable reference population. In this case the population size should be reported under the field 6.2 and not under 6.4.

The reporting unit to be used to report the population size under the field 6.2 is given on the species checklist¹⁴. If a Member State wishes to report population size using a different unit this can also be reported at 6.4 but must be **in addition** and not as an alternative.

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 6.2.b and c) should be given as minimum and maximum numbers. Minimum and maximum should always be entered together i.e. not as minimum only/maximum only.

There is also a 'best single value' field 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 Best single value field and NOT the b) Minimum or c) Maximum fields. The source of this estimate can then be clarified in field 6.3 (see below). The numbers reported should not be rounded.

Both interval and a best single value can be provided together in exceptional cases, for example where the interval coming from the survey data is quite large (e.g. 95% confidence interval) and an expert evaluation of the actual population size is available. In EU biogeographical assessments geometrical mean is usually taken as a mean population size within a Member State's biogeographical region. The expert evaluation of survey data can result in more accurate single value to be used in the EU assessments. This should be explained in the field 6.17.

If the population size reported at 6.2 was estimated by converting the information reported at 6.4 the information on the conversion should be given using field 6.17 Additional information.

For wide-ranging marine species (e.g. whales, dolphins, turtles), use population estimates from regional marine agreements such as ASCOBANS or any other estimates made in cooperation between Member States sharing the same population if available. Each Member State should report the results for their territory (i.e. a respective proportion of the regional population).

6.3 Type of estimate

The type of estimate for the reported range in field 6.2 (b) and (c) or the best single value in field 6.2(d) should be outlined here. The options for reporting this are; best estimate, 6-year mean, 95% confidence interval or minimum.

- Best estimate – the best available single figure or interval, derived from e.g. a population census, a compilation of figures from localities, modelled population size based on population

¹⁴ http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019

densities and distribution data or expert opinion, but for which 95% confidence interval could not be calculated. Whether a best estimates comes from the monitoring data, modeling or from an expert opinion should be assessed in the field 6.6

- multi-year mean – average value or interval where population size is monitored several times during the period provided in 6.1
- 95% confidence interval – estimates derived from sample surveys or a model in which 95% confidence limits could be calculated
- Minimum – for estimates where insufficient data exist to provide an population size estimate, but where a population size is known to be above certain value or interval or where reported interval estimates/best single value coming from a sample survey or a monitoring project are believed to be strong underestimates of a real population size.

6.4 Additional population size (optional)

This field allows the Member State to report population size using units other than the unit given on the species checklist. The guidance on reporting the numbers is the same as for field 6.2. This is the assessment unit. If used for assessment Member State should assure, that it can capture trends and is biologically suitable for expressing the favourable reference population.

If the population size reported at 6.2 was estimated by converting the information reported at 6.4 please give information on the conversion using field 6.17 Additional information. Field 6.4 is not a substitute for field 6.2.

6.5 Type of estimate

See instructions for field 6.3.

6.6 Population size - Method used

This field is used to detail the methodology used for calculating population size in field 6.2 OR the additional population size reported in field 6.4 (in a situation where the population size in 6.2 is converted from the value in 6.4). Report one of the following categories:

- a) Complete survey or a statistically robust estimate (e.g. direct counts, counting based on indices of animal presence, estimates based on mark-recapture methods)
- b) Based mainly on extrapolation from a limited amount of data (e.g. from sample surveys of parts of the population, using models based on abundance and distribution data, or from an existing estimate using 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, indicate the category for the most important source of data.

6.7 Short-term trend period

Give 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 (*Reference to be updated*).

The short term trend should be used for the assessment. Any large scale deviation from this should be explained under field 6.17 Additional information.

6.8 Short-term trend direction

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 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.

(The outcomes of the discussions on Art. 12 Population trends will be considered.)

(More guidance will be provided on how population trend should be assessed for species with non-standard population units like grids or localities)

Indicate if the population trend over the reported period in field 6.7 was:

- 0 for stable population trend
- + for increasing population trend
- - for decreasing population trend
- U for uncertain population trend
- x for unknown population trend.

Report 'uncertain' if some data is available but it is not enough to accurately determine direction. Use 'unknown' where there is 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 6.17 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 6.16 'Change and reason for change in population', and the trend should be reported as 'unknown', unless other information also clearly shows a trend.

Further guidance is given in Section *(Reference to be updated)*.

6.9 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 6.7. 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 6.9 a and b). Where a statistically robust method has been used (see Field 6.10) please provide the confidence interval (e.g. 95%) in field 6.9 c with the upper and lower confidence interval limits in fields 6.9 a and 6.9 b respectively.

6.10 Short-term trend – Method used

Use one of the following categories:

- a) complete survey or a statistically robust estimate (e.g. comparing two estimates of population size originating from complete censuses; or 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 only from parts of species 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.

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

6.11 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 6.10–6.12 is optional.

For guidance in filling in field **6.12 ‘Long-term trend direction’**, field **6.13 ‘Long-term trend magnitude’** and field **6.14 ‘Long-term trend method used’**, see fields 6.8 to 6.10 (short-term trends).

Further guidance is given in Section (*Reference to be updated*).

6.15 Favourable reference population

Favourable reference population is a population in a given biogeographical region considered the minimum necessary to ensure the long-term viability of the species. The information on the size of this population 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 6.2 or 6.4).

The favourable reference population is the population required for the species to be at Favourable Conservation Status (FCS). The following information is requested in field 6.15:

- a) The population size or
- b) If operators (\approx , $>$, \gg , $<$) were used for the assessment, indicate here with the relevant symbol (\approx ‘approximately equal to’, $>$ ‘more than’, \gg ‘much more than’, $<$ ‘less than’).or
- c) If the favourable reference population is unknown use ‘x’ for the reference population
- d) The method used to set reference values if operators (6.15 (b)) are not used (free text).

If an operator is used to estimate an favourable reference population, it should be compared with the minimum population size estimate (see Section *Reference to be updated*).

The operator ‘less than’ ($<$) can be used only in limited cases, see Section (*Reference to be updated*). If used, an explanation must be provided in field 6.17 Additional information.

If an operator is used, then there is no need to enter a value in the reference value field (6.14a), or the value reported must be the same as that of the actual (current) value reported (field 6.2 respectively 6.4). If the value reported for an FRV differs from the actual reported value, no operator should be used. The use of operators should help to reduce the use of ‘unknown’ to a minimum.

If the reference value has changed in comparison to the previous reporting period, the reason for this should be explained in field 6.17 Additional information.

Favourable reference values and use of operators are discussed in more detail in Section (*Reference to be updated*).

6.16 Change and reason for change in population

To avoid potential misinterpretation and to clarify potential differences in population between reporting rounds, this field is used to indicate if there is any change in the population sizes reported and if yes, what is the nature of those changes.

Is there is a difference between reporting periods? If yes, provide the nature of that change. More than one option (a to d) can be chosen.

- a) yes, due to genuine changes
- 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 nature of change.

Only the main reason for change should be reported. The change is mainly due to (select one of the reasons above):

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

If a Member State wishes to give further information, this can be done in field 6.17 'Additional information'.

6.17 Additional information (optional)

Additional information to help understand the information given on population can be reported here as free text. (*Examples to be provided*).

7 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. Meaning of 'habitat' in 'habitat for the species' is different to 'habitat types' defined under Annex I and 'habitat' for habitat classifications such as EUNIS which are more correctly biotopes. Habitat quality includes availability of prey and fragmentation where appropriate, further guidance is given in Section (*Reference to be updated*).

7.1 Sufficiency of area and quality of occupied habitat

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

The reporting format asks for information on the sufficiency of habitat area and quality. These questions are aimed to identify species for which habitat area and/or habitat quality is a limiting factor for not achieving 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 7.1.

7.2 Method used – Availability of habitat for the species

Use one of the following categories:

- a) complete survey or a statistically robust estimate (*Examples to be provided*)
- b) based mainly on extrapolation from a limited amount of data (*Examples to be provided*).
- 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, indicate the category for the most important source of data.

7.3 Short-term trend period

Give 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 report 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 (*Reference to be updated*).

7.4 Short-term trend direction

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

The assessment of habitat for the species considers both quality and area. Trend direction should be assessed by using the combinations in Table 6 below (area/quality).

Table 6: Assessing trend direction of habitat for the species

Reported trend	Relation to area/quality status
0 = stable	area =/quality = (both stable)
+ = increasing	Area +/quality = <u>or</u> Area +/ quality + <u>or</u> Area =/quality + (one is increasing)
- = decreasing	Area -/Quality = or Area -/quality- or Area =/quality - (one is decreasing)
x = unknown	either ? or Area +/ quality ?and Area ?/quality + (if no better data available)

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 the field 7.9 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.

7.5 Short-term trend – Method used

Use one of the following categories:

- a) complete survey or a statistically robust estimate (*Examples to be provided*)
- b) based mainly on extrapolation from a limited amount of data (*Examples to be provided*).
- 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, indicate the category for the most important source of data.

7.6 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 7.7 and 7.8 are optional as well.

For guidance in filling in field **7.7 ‘Long-term trend direction’** and field **7.8 ‘Long-term trend method used’**, see fields 7.4 and 7.5 (short-term trends).

Further guidance is given in Section (*Reference to be updated*).

7.9 Additional information (optional)

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

8 Main pressures and threats

This section provides information on main pressures and threats. The 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 requested.

Pressures are past and present impacts that have an effect on the long-term viability of the species or its habitat(s); threats are future/foreseeable impacts that can affect the long-term viability of the species and/or its habitat(s). The threats should not cover theoretical threats, but rather those issues judged to be reasonably likely. This may include continuation of pressures (see

Table 7).

Table 7: Definition of pressure and threat (in the context of Article 17 reporting)

	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

8.1 Characterisation of pressures/threats

Provide the list of pressures and 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 8 below, should be reported.

For each species:

- select from the list of pressures/threats a **maximum of 10 entries** using the **code at the second level** of the hierarchical list. The list of pressures and threats will be available from the Reference Portal¹⁵.
- 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 the 'pressure' heading and 'threat' left blank. A maximum of 5 (five) High level pressures and 5 (five) High level threats should be noted. This will make it possible to identify the most important factors at a European scale.

Table 8: Definition of ranked pressures/threats

Code	Meaning	Comment
H	High importance/impact	Important direct or immediate influence and/or acting over large areas (e.g. a pressure is the major cause or one of the major causes, if acting in combination with other pressures, of decline of species population, range or habitat area or deterioration of habitat quality; 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 declines)

¹⁵ http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019

Table 9 provides an example of pressures and threats characterisation using a maximum of 5 pressures of High importance.

Table 9: An example of pressures and threats characterisation

Characterisation of pressures/threats		
a) Pressure/threat <i>List a maximum of 10 pressures and a maximum of 10 threats using the code list provided on the reference portal</i>	b) Ranking of pressure/threat <i>Indicate whether the pressure/threat is of: H = high importance (maximum 5 entries for pressures and 5 entries for threats) M = medium importance</i>	
	Pressure	Threat
<i>A16 Application of synthetic fertilisers</i>	H	H
<i>A26 Abstractions from surface water for agriculture</i>	M	-
<i>B04 Clear-cutting, removal of all trees</i>	H	M
<i>D01 Roads, railroads, paths and related infrastructure (e.g. bridges, viaducts, tunnels)</i>	H	H
<i>D02 Electricity and communication infrastructure (e.g. phone lines, masts and antennas)</i>	H	M
<i>E01 Conversion from other land uses to housing and settlement areas (excl. drainage)</i>	M	H
<i>I02 Problematic native plants & animals</i>	H	H
<i>K04 Natural processes of eutrophication or acidification</i>	-	M

The impact of the pressure or threat should not be evaluated in relation to other pressures or threats (the high rank for the most important pressures and moderate for those which are less important) The impact of the pressure should reflect influence of a pressure or threat on conservation status of the species.

More detailed guidance on use of pressure/threats is provided in the notes in the list of pressures and threats available from the Reference Portal.

8.2 Sources of information (optional)

Provide sources of information relevant to Section 8 (optional) with URL, metadata, or supporting evidence for the highest ranking pressures only (i.e. High importance).

8.3 Additional information (optional)

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

9 Conservation measures

This section contains information on conservation measures, including management plans, taken to maintain or to restore the species at Favourable Conservation Status. The measures are only reported for Annex II species. The section contains a list of measures and their evaluation. The evaluation is provided in general and is not reported on a measure-by-measure basis.

9.1 Status of measures

Select whether measures are needed or not. If the answer is yes, measures are needed then proceed to answer the following 3 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).

Examples of how to report on measures can be found in Section *(Reference to be updated)*.

(More guidance to be provided on how to deal with situations where only a part of measures had been taken.)

9.2 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 had been taken (9.1b Measures identified and taken is marked YES) Even if several purposes may be identified, please indicate **only the main** one in terms of implementing the measure.

- 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').

9.3 Location of the measures

Indicate where the measures are mostly being implemented. This part should only be filled in if the conservation measures had been taken (9.1b Measures identified and taken is marked YES)

- a) Only inside Natura 2000
- b) Both inside and outside Natura 2000
- c) Only outside Natura 2000.

9.4 Response to the measures

Provide an estimate of when the measures taken start, or are expected to start, to neutralize the pressure and to produce positive effects (with regard to the main purpose of the measures indicated in the field 9.2). 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).

9.5 List of the main conservation measures

List a maximum of 10 conservation measures using the code that is provided on the reference portal¹⁶

9.6 Additional information (optional)

Additional information to help understand the information given on conservation measures can be reported here (*Examples to be provided*).

10 Future prospects

This section provides information on future prospects of three parameters (range, population and habitat for the species). Future prospects indicates 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 for the species).

10.1 Future prospects of parameters

For each parameter; range, population and habitat of the species, indicate if the prospects are Good, Poor, Bad or Unknown. Prospects are considered good (if parameter is favourable and expected to remain favourable or is unfavourable but expected to improve) poor (if moderate deterioration is expected), bad (if serious deterioration is expected) or unknown. The expected trend in conservation status is a result of balance between reported pressures and threats and measures being taken.

An evaluation matrix is provided in Section (*Reference to be updated*).

10.2 Additional information (optional)

Additional information to help understand the how future prospects was assessed can be reported here (*Examples to be provided*).

11 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 Annex C matrix.

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).

11.1 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).

The status of range is favourable if short-term trend (field 5.3) is stable (loss and expansion in balance) or increasing and range surface area (field 5.1) is not smaller than the favourable reference range (field 5.10).

¹⁶ http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019

The status of range is unfavourable bad if large decline equivalent to a loss of more than 1% per year within short-term trend period (field 5.2) has been observed or is expected, or range surface area (field 5.1) is more than 10% below favourable reference range (field 5.10).

The status of range is unknown if there are no or insufficient reliable information available.

11.2 Population

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

The status of population is favourable if population size in reporting unit (field 6.2) or additional population size (field 6.4) is not lower than favourable reference population (field 6.15) and reproduction, mortality and age structure are not deviating from normal.

Although the evaluation matrix does not mention population trends as a criterion for favourable status (unlike the two other parameters) the situations where the population trends will be negative and the population status is still favourable will be rare.

The status of population is unfavourable bad if large decline equivalent to a loss of more than 1% per year within short-term trend period (field 6.7) has been observed or is expected or if population size in reporting unit (field 6.2) or additional population size (field 6.4) is more than 25% below favourable reference population (field 6.15), or if reproduction, mortality and age structure are strongly deviating from normal.

The status of population is unknown if there is no or insufficient reliable information available.

Apart from age structure also genetical structure should be considered in the same way when assessing the status of population.

11.3 Habitat for the species

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

The status of habitat for the species is favourable if area of habitat is sufficiently large and short-term trend is stable or increasing (field 7.4) and habitat quality is suitable for the long-term survival of the species.

The area of habitat can be considered 'sufficiently large' and habitat quality 'suitable' if any of the questions under the field 7.1 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?').

The fragmentation should be considered when evaluating the quality of the habitat.

The status of habitat for the species is unfavourable bad if 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.

The status of habitat for the species is unknown if there is no or insufficient reliable information available.

11.4 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).

The status of future prospects is favourable if main pressures and threats (fields 7.1 a, b and c) to the species are not significant and it can be expected that the species will remain viable on the long-term.

The status of future prospects is unfavourable bad if there is severe influence of pressures and threats to the species (fields 7.1 a, b and c) , prospects for the future of the species are very bad (field 10.1) and its long-term viability is at risk.

The status of future prospects is unknown if there is no or insufficient reliable information available.

The prospects are assessed separately for three remaining parameters: Range, Population and Habitat for the species (field 10.1 and then combined together using the matrix in the Table 10.

Table 10: Combining evaluation of the three parameters to give Future prospects for a species

	Favourable	Unfavourable-Inadequate	Unfavourable-Bad	Unknown
Future prospects	All parameters have good prospects OR prospects of one parameter unknown, the other prospects good	Other combination	One or more parameters have bad prospects	Two or more x and no parameter with bad prospects

11.5 Overall assessment of conservation status

Give the result of the overall assessment of conservation status using the four categories available: 'favourable' (FV), 'unfavourable-inadequate' (U1), 'unfavourable-bad' (U2) and 'unknown' (XX). based on the Evaluation matrix for assessing conservation status for a species (see Annex C).

11.6 Overall trend in conservation status

If the overall conservation status reported in 11.5 is either 'Favourable', 'Unfavourable - Inadequate' or 'Unfavourable – bad', indicate its trend (qualifier) as follows:

- + for improving conservation status trend
- - for deteriorating conservation status trend
- = for stable conservation status trend
- x for unknown conservation status trend

The qualifier should be based on trends over the reporting period (2013-2018). As the trends over reporting period (2007-2018) are often not available, short-term trends can be used to assess the trend in the conservation status, unless there is an evidence that the trend during the reporting period is different than a measured short-term trend (e.g. if after past decline of 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 the field 11.8.

For more details see Section (*Reference to be updated*).

11.7 Change and reasons for change in conservation status

This field is used to report on the change (if any) and reason for change in conservation status (assessment and trend) between reporting rounds;

Is there is a difference between reporting periods? If yes, provide the nature of that change. More than one option can be chosen.

- a) yes, due to genuine change
- b) yes, due to more accurate data or improve knowledge
- 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 nature of change.

Only the main reason for change should be reported. The change is mainly due to (select one of the reasons above):

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

If a Member State wishes to give further information, this can be done in field 11.8 'Additional information'.

11.8 Additional information

Additional information to help understand the information in fields 11.1 to 11.7. (*Examples to be provided*).

12 NATURA 2000 (pSCIs, SCIs and SACs) coverage for Annex II species

This section provides information on population size and population trend within the Natura 2000 network. This section only concerns Annex II species. The requested information should cover the proposed Sites of Community Importance (pSCIs), the Sites of Community Importance (SCIs) and Special Areas of Conservation (SACs) of the Natura 2000 network within the biogeographical/marine region concerned.

The information relates to all pSCIs/SCIs/SACs where the Annex II 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 (*Reference to be updated*).

12.1 Population size

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 the field 6.2 Population size (in reporting unit) and follow the same guidance as for the population size estimates in fields 6.2.

For wide-ranging marine species (e.g. whales, dolphins, turtles), use population estimates from regional marine agreements such as ASCOBANS or any other estimates made in cooperation between Member States sharing the same population if available. Each Member State should report the results for their territory (i.e. a respective proportion of the regional population).

12.2 Type of estimate

The type of estimate for the reported range in field 12.1 (b) and (c) or the best single value in field 12.1 (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 6.3).

12.3 Method used

Use one of the following categories:

- a) Complete survey or a statistically robust estimate (*Examples to be provided*)
- b) Based mainly on extrapolation from a limited amount of data (*Examples to be provided*)
- 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, indicate the category for the most important source of data.

12.4 Short-term trend within the network of pSCIs, SCIs and SACs – direction

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 Natura 2000 sites. Fluctuation (or oscillation) is not a directional change of a parameter, and therefore fluctuation is not a trend.

Indicate whether the trend of population size is:

- 0 = stable
- + = increasing
- - = decreasing
- u = uncertain
- x = unknown.

Short-term trend within the Natura 2000 network should be assessed over the period indicated in field 6.7.

See instruction for the field 6.8 Short-term trend direction:

12.5 Method used – Short-term trend direction

Use one of the following categories:

- a) Complete survey or a statistically robust estimate (*Examples to be provided*)
- b) Based mainly on extrapolation from a limited amount of data (*Examples to be provided*)
- 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, indicate the category for the most important source of data.

12.6 Additional information

Additional information to help understand Natura2000 coverage can be reported here. (*Examples to be provided*).

13 Complementary information

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

13.1 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.

13.2 Transboundary assessment (optional)

Where a joint conservation status assessment is made between two Member States i.e. where there is a wide ranging trans boundary species population, further detailed information can be given on it here. The information to provide is:

- Member States involved (use code list on the Reference Portal) and if any non-EU countries were involved in the assessment
- parameters assessed in the transboundary area (usually range and population)
- the % of the total population in the MS concerned
- list of joint management measures
- references/links, if available

For working examples of transboundary assessments see Section (*Reference to be updated*).

13.3 Other relevant information (optional)

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

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 Member State should report all habitats listed in Annex I of the Habitats Directive for every biogeographical or marine region in which they occur (see also next paragraph). The report is optional for habitats with a scientific reserve. A checklist of habitats covered by the Habitats Directive and their occurrence per biogeographical or marine region and Member State will be made available from the Article 17 Reference Portal¹⁷.

To reflect the specificity of reporting in these situations the habitats checklist distinguishes apart from 'present' also habitats with 'marginal occurrence'. The third category used in the check-list is scientific reserve. The overview of the categories in the habitat check-list with indication of whether a reports is expected and which parts of the report remain mandatory is provided in the Table 11. A Short definition of categories are given below the table. More detailed definition of habitat categories can be found in the Section (*Reference to be updated*).

Table 11: Categories of habitats and indication of the expected content of the Article 17 report

Habitat category	Report	Information which is mandatory to report
Present regularly (PRE)	Mandatory	Full report
Marginal (MAR)	Mandatory partial report	Whenever possible: <ul style="list-style-type: none"> • 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) • structures and functions - condition of habitat (field 6.2) and method used (field 6.1)
Scientific reserve (SR)	Optional	<ul style="list-style-type: none"> • any other relevant information, e.g. related to the problems of habitat interpretation (field 13.3)

- **Present regularly (PRE)**

The habitat is present in the region. A full report is mandatory¹⁸.

- **Marginal (MAR)**

Habitat of marginal occurrence, i.e. principally in one region (or Member State) with habitat area extending to a neighbouring region (or Member State), where area of habitat is insignificant.

- **Scientific reserve (SR)**

¹⁷ http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019

¹⁸ The species or habitat types which do not occur in the area of Cyprus where the Community acquis applies at present no report is expected but the species should remain in the checklist.

In the case of habitats, this category applies if, for instance, it is not possible to judge whether a habitat occurs or not in the biogeographical region due to problems of interpretation of the habitat definition in the Interpretation manual.

Field-by-field guidance for completing ‘Annex D’ Habitat reports

NB: To be completed for each Annex I habitat present¹⁹.

It is recommended that the free text information in the different fields is written in English to facilitate the further use of information in the EU analysis and to allow a wider readership.

NATIONAL LEVEL

The following information to be provided at the national level:

1 General Information

1.1 Member State

Select the two-digit codes from ISO 3166, except that UK should be used instead of GB for the United Kingdom. A table giving the codes can be found on the Reference Portal²⁰.

1.2 Habitat Code

Use the code given in the habitats checklist (see the Reference Portal, these are the same codes as given in the 2007 edition of the Interpretation Manual²¹). Do not use any other coding systems.

Reports are expected for each biogeographic region for which the habitat type is listed in the check list for reporting under the Nature directives (see section II.f ‘Species & habitat types to be reported’ for marginal occurrence).

2 Maps

This section contains information on maps to be submitted together with the tabular information as a part of the Article 17 report. Apart from mandatory distribution map also other kind of maps with information relevant for understanding the assessment of conservation status can be provided.

2.1 Year or period

Year or period when the actual distribution data were collected. Use the following formats: YYYY (for year) and YYYY–YYYY (for period, year–year).

(Limits for use of the old data to be defined).

¹⁹ A checklist of species thought to be present in each Member State for which a report is expected is available at http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019/

²⁰ http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019/

²¹ *Interpretation manual of European Union habitats - EUR 27*. DG Environment - Nature and Biodiversity. http://ec.europa.eu/environment/nature/legislation/habitatsdirective/docs/2007_07_im.pdf

2.2 Distribution map

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

10x10 km ETRS89 grid, projection ETRS LAEA 5210²²

The distribution map should provide information about the actual occurrences of the habitat, which should be based on the results of a comprehensive national mapping or inventory of the habitat wherever possible.

The distribution map will consist of 10 x 10 km ETRS 89 grid cells in the ETRS LAEA 52 10 projection²³. The gridded dataset will consist 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 habitat in a grid cell is not permitted. The period over which the distribution data was collected should be included in the metadata following the INSPIRE guidelines.

The grids for individual Member States are available for download from the EEA website; <http://www.eea.europa.eu/data-and-maps/data/eea-reference-grids-2>.

2.3 Method used

Use one of the following categories to define the method used for the distribution map:

- 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 habitat 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, indicate the category for the most important source of data.

2.4 Additional maps

Member States may also submit additional maps, for example giving more detailed distribution data (e.g. at higher resolution) or a range map (See section 5 below). 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 10x10 km or with grids other than the ETRS89 LAEA5210 grid, or close to the 10x10 km, may be reported here.

²² For small Member States such as Luxembourg, Malta and Cyprus, maps of 5x5 km or 1x1 km grids are allowed. These will then be aggregated by ETC/BD to 10x10 km for visualisation at the European level.

²³ European Terrestrial Reference System 1989 Lambert Azimuthal Equal Area Latitude of origin 52 N, Longitude of origin (central meridian) 10°E. <http://www.eionet.europa.eu/gis>

BIOGEOGRAPHICAL REGION LEVEL

3 Biogeographical or marine level

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 Member State, three separate reports are required.

Reports are expected for each biogeographical or marine region for which the habitat is listed in the habitats checklist.

3.1 Biogeographical region or marine region where the habitat occurs.

Biogeographical region or marine region concerned within the Member State.

- Use the following names for biogeographical regions:

Table 12: Biogeographical regions		
Alpine	Boreal	Macaronesian
Atlantic	Continental	Pannonian
Black Sea	Mediterranean	Steppic

- Use the following names for marine regions:

Table 13: Marine regions		
Marine Atlantic	Marine Black Sea	Marine Mediterranean
Marine Macaronesian	Marine Baltic	

Images and limits of bioregions can be found on reference portal.

3.2 Sources of information

For information from published sources related to sections 4-6 (including the published sources related to distribution maps, on which the range calculation is based upon) and sections 8-12, provide bibliographic references or links to 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://', 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 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. The standardised process consists of two steps:

- 1 Creating envelope(s) around distribution grids. Range should exclude major discontinuities that are natural i.e. caused by ecological factors. A discontinuity of at least 40–50 km is suggested to be considered as a gap in the range
- 2 Fitting the envelope(s) to territorial and environmental constraints.

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 at field 2.5 (Additional maps).

Complementary information and methods for range calculation can be found in the Section (*Reference to be updated*).

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 km x 10 km) which occur entirely or partly within the region. In general the surface area is provided in 10 x 10 km² resolution and the minimum area should be 100 km². For localised habitats with very small range it is possible to report using finer resolution for example range is the area of locality where habitat occurs, which can be several square meters. Decimals are allowed, as the range of some species can be very small.

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 (*Reference to be updated*).

4.3 Short-term trend direction

Trend is a (measure of a) directional change of a parameter over time. The range trend informs on changes in overall extend of habitats distribution. Although rare in case of range of habitat the 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 4.2 was:

- 0 = stable
- + = increasing
- - = decreasing
- u = uncertain
- x = unknown.

Report 'uncertain' if some data is available but it is not enough to accurately determine direction. Use 'unknown' where there is 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 a trend. This apparent change should be indicated in field 4.11 'Change and reason for change in surface area range', and the trend should be reported as 'unknown', unless other information also clearly shows a trend.

Further guidance is given in Section (*Reference to be updated*).

4.4 Short-term trend magnitude

If possible quantify the percentage change over period indicated in the 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 under the minimum and maximum fields.

4.5 Short-term trend Method used

Use 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 occurrences with good statistical power)
- b) based mainly on extrapolation from a limited amount of data (e.g. trends derived from data collected on other purpose like volunteer data on occurrence of habitat or on data collected only from a part of geographical range of a habitat, or trends based on measuring some other predictors of habitats distribution, like landcover 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, indicate the category for the most important source of data.

4.6 Long-term trend Period

The long-term trend should be evaluated over a period of 24 years (4 reporting cycles). For the 2013 - 2018 reports this 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 4.6 and 4.7, is optional.

For guidance in filling in fields **4.7 Long-term trend direction** , and **4.8 Long-term trend magnitude** and **4.9 Long-term trend method used** please see the guidance for fields 4.2 to 4.4 (short-term trends). Further guidance is given in (*Reference to be updated*).

4.10 Favourable reference range

Favourable reference range is a range within which all significant ecological variations of the habitat/species are included for a given biogeographical region and which is sufficiently large to allow

the long term survival of the habitat/species. This information is needed to undertake the evaluation of conservation status according to Annex E.

The favourable reference range is the range required for the habitat to be at Favourable Conservation Status. Information on a), or b) or c) and d) is requested:

- a) area in km² or;
- b) if operators (\approx , $>$, \gg) were used for the assessment, indicate here with the relevant symbol (\approx 'approximately equal to', $>$ 'more than', \gg '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 reference value (free text field).

The use of operators should help to reduce the use of 'unknown' to a minimum;

- If an operator is used, then there is no need to insert a value in field 4.10 a) otherwise the value reported must be the same as that of the actual value reported (field 4.1 Surface area)
- If the value reported for an FRR differs from the value reported in field 4.1, 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 (*Reference to be updated*).

4.11 Change and reason for change in surface area of range

To avoid potential misinterpretation and to clarify potential differences in the surface area of the range between reporting rounds, this field is used to indicate if there is any change in the population sizes reported and if yes, what the nature of those changes are.

Is there is a difference between reporting periods? If yes, provide the nature of that change. More than one option (a to d) can be chosen.

- a) yes, due to genuine changes
- 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 nature of change.

Only the main reason for change should be reported. The change is mainly due to (select one of the reasons above):

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

If a Member State wishes to give further information (e.g. cases where range surface does not change, but its borders are moving, or fragmentation of range), this can be done in field 4.12 Additional information.

4.12 Additional information

Additional information to help understand the information given on range can be reported here (*Examples to be provide*).

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

Year or period when for which the surface area of habitat is valid, which should be as close as possible to the end of the reporting period. Use the following formats: YYYY (for year) and YYYY–YYYY (for period, year–year).

5.2 Surface area

This refers to the total area (in km²) currently occupied by the habitat within the biogeographical or marine region of the Member State concerned. For overlapping habitats see Section (*Reference to be updated*).

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 minimum only/maximum only.

There is also a ‘best single value’ field 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 surface area of 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 in exceptional cases, for example where the interval coming from a modeling is quite large (e.g. 95% confidence interval) and an expert evaluation of the actual surface area of habitat is available. In EU biogeographical assessments geometrical mean is usually taken as a mean surface area of habitat within a Member State’s biogeographical region. The expert evaluation of modeling results can result in more accurate single value to be used in the EU assessments. This should be explained in the field 5.15.

5.3 Type of estimate

The type of estimate for the reported range in field 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, 95% confidence interval or minimum.

- Best estimate – the best available single figure 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, modeling or from an expert opinion should be assessed in the field 5.4
- 95% confidence interval – estimates derived from sample surveys or a model in which 95% confidence interval could be calculated.

- Minimum – for estimates where insufficient data exist to provide an estimate of surface area of habitat, but where an area is known to be above certain value or interval or where reported interval estimates coming from a sample survey or a model are believed to be strong underestimates of a real surface area of habitat.

5.4 Method used

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

- a) Complete survey or a statistically robust estimate (*Examples to be provided*)
- b) Based mainly on extrapolation from a limited amount of data (*Examples to be provided*)
- 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, indicate the category for the most important source of data.

5.5 Short-term trend period

Give 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 (*Reference to be updated*).

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

Trend is a (measure of a) directional change of a parameter over time. The trend in surface area of habitat informs on changes in overall area covered by the habitat. Although rare in case of habitat 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:

- 0 for stable habitat trend
- + for increasing habitat trend
- - for decreasing habitat trend
- u for uncertain habitat trend
- x for unknown habitat trend.

Report 'uncertain' if some data is available but it is not enough to accurately determine direction. Use 'unknown' where there is 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', and the trend should be reported as 'unknown', unless other information also clearly shows a trend.

Further guidance is given in Section (*Reference to be updated*).

5.7 Short-term trend magnitude

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 CI limits in fields 5.6 a and 5.6 b respectively.

5.8 Short-term method used

Use of of the following categories to define the method used to calculate the area covered by the habitat:

- a) Complete survey or a statistically robust estimate (*Examples to be provided*)
- b) Based mainly on extrapolation from a limited amount of data (*Examples to be provided*)
- 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, indicate the category for the most important source of data.

5.9 Long-term trend Period

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 – 5.12 is optional.

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).

Further guidance is given in Section (*Reference to be updated*).

5.13 Favourable reference area

Favourable reference area is a 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).

The favourable reference are is the are required for the habitat to be at favourable conservation status (FCS). The following information is requested.

- a) Provide area in km²

- b) If operators (\approx , $>$, \gg , $<$) were used for the assessment, please indicate it here with the relevant symbol (\approx “approximately equal to”, $>$ “more than”, \gg “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 method used to set the reference value (free text field).

If an operator is used to estimate an favourable reference area, it should be compared with the minimum estimate of surface area given in field 5.2 (*reference for more guidance to be updated*)

The operator ‘less than’ ($<$) can be used only in special cases like for the habitat type *Degraded raised bog still capable of natural regeneration (7120)*; see Section (*Reference to be updated*). If used, an explanation must be provided in field 5.15 Additional information.

If an operator is used, then there is no need to enter a value in the reference value field (5.13a), or the value reported must be the same as that of the actual (current) value reported (field 5.2). If the value reported for an FRV differs from the actual reported value, no operator should be used. The use of operators should help to reduce the use of ‘unknown’ to a minimum.

If 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 use of operators are discussed in more detail in Section (*Reference to be updated*).

5.14 Change and reason for change in surface area

To avoid potential misinterpretation and to clarify potential differences in surface area of habitat between reporting rounds, indicate if there is a difference between reporting periods. If yes, provide the nature of that change. More than one option (a to d) can be chosen.

- a) genuine change
- b) improved knowledge or more accurate data
- c) use of a different method (including taxonomical change or use of different thresholds)
- d) if there is no information on nature of change.

Only the main reason for change should be reported. The change is mainly due to (select one of the reasons above):

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

If a Member State wishes to give further information, this can be done in field 5.15 ‘Additional information’.

5.15 Additional information

Additional information to help understand the information given on habitat area can be reported here as free text. (*Examples to be provided*)

6 Structure and functions

This section provides information on proportion of the habitat area in good and not-good condition, its trends and on typical species. The structure is considered to be the physical components of a habitat type which will more than likely be formed by species both living and dead, but can also include abiotic features. The functions refer to the ecological processes occurring as a number of temporal and spatial scales which can vary greatly between habitat types.

6.1 Condition of habitat

Provide the area of habitat with good, not-good and unknown conditions. 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 as km² and can be provided as a range; minimum and maximum, or if a precise value is known this should be filled into both minimum and maximum fields.

6.2 Condition of habitat – Method used

Use one of the following categories to show the method used to calculate the area in field 6.1:

- a) Complete survey or a statistically robust estimate (*Examples to be provided*)
- b) Based mainly on extrapolation from a limited amount of data (*Examples to be provided*)
- 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, indicate the category for the most important source of data.

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

Give 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 (*Reference to be updated*).

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

Trend is a (measure of a) directional change of a parameter over time. The trend of habitat area in good conditions should inform on changes in proportions between the habitat areas in good and not good conditions. Although rare in case of range of 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:

- 0 = stable
- + = increasing
- - = decreasing
- u = uncertain
- x = unknown

Report 'uncertain' if some data was available but it was not enough to accurately determine direction. Use 'unknown' where there is 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.

Further guidance is given in Section (*Reference to be updated*).

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

Use one of the following categories:

- a) complete survey or a statistically robust estimate (*Examples to be provided*)
- b) based mainly on extrapolation from a limited amount of data (*Examples to be provided*)
- 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, indicate the category for the most important source of data.

6.6 Typical species

The typical species of the habitat is reported as it is used to assess whether a habitat is at FCS. 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 middle-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 on Annexes II, IV & V of the Habitats Directive.

The information requested is;

- a) the list of typical species has changed in comparison with the previous reporting period
- b) the list of typical species has not changed in comparison with the previous reporting period

If the list of typical species has changed then an addition spreadsheet with an updated list is requested.

Please use latin names and it is recommended to use names from the Pan-European Species directories Infrastructure (PESI²⁴) where appropriate.

An extensive definition of typical species (and structure and functions) can be found in Section (*Reference to be updated*).

6.7 Typical species - Method used

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

²⁴ <http://www.eu-nomen.eu/>

If option b) was chosen in field 6.6, there is no requirement to complete field 6.7.

6.8 Additional information

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

7 Main pressures and threats

This section provides information on main pressures and threats. The 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 requested.

Pressures are past and present impacts that have an effect on the long-term viability of the habitat and its typical species; threats are future/foreseeable impacts that can affect the long-term viability of the habitat and its typical species. The threats should not cover theoretical threats, but rather those issues judged to be reasonably likely. This may include continuation of pressures (see Table 14).

Table 14: Definition of pressure and threat (in the context of Article 17 reporting)

	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 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 15, should be reported.

For each habitat:

- a) select from the list of pressures/threats, a **maximum of 10 entries** using the **code at the second level** of the hierarchical list. The list of pressures and threats will be available from the Reference Portal²⁵
- 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 the 'pressure' heading and 'threat' left blank. A maximum of 5 High level pressures and 5 High level threats should be noted. This will make it possible to identify the most important factors at a European scale.

²⁵ http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019

Table 15: Definition of ranked pressures/threats

Code	Meaning	Comment
H	High importance/impact	Important direct or immediate influence and/or acting over large areas (e.g. a pressure is the major cause or one of the major causes, if acting in combination with other pressures, of 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 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 declines)

Table 16 provides an example of pressures and threats characterisation using a maximum of 5 pressures of High importance.

Table 16: An example of pressures and threats characterisation

Characterisation of pressures/threats															
a) Pressure/threat	c) Ranking of pressure/threat														
<i>List a maximum of 10 pressures and a maximum of 10 threats using the code list provided on the reference portal</i>	<i>Indicate whether the pressure/threat is of: H = high importance (maximum 5 entries for pressures and 5 entries for threats) M = medium importance</i>														
	<table border="1"> <thead> <tr> <th>Pressure</th> <th>Threat</th> </tr> </thead> <tbody> <tr> <td>A16 Application of synthetic fertilisers</td> <td>H</td> </tr> <tr> <td>A26 Abstractions from surface water for agriculture</td> <td>-</td> </tr> <tr> <td>B04 Clear-cutting, removal of all trees</td> <td>M</td> </tr> <tr> <td>D01 Roads, railroads, paths and related infrastructure (e.g. bridges, viaducts, tunnels)</td> <td>H</td> </tr> <tr> <td>D02 Electricity and communication infrastructure (e.g. phone lines, masts and antennas)</td> <td>M</td> </tr> <tr> <td>E01 Conversion from other land uses to housing and settlement areas (excl. drainage)</td> <td>H</td> </tr> </tbody> </table>	Pressure	Threat	A16 Application of synthetic fertilisers	H	A26 Abstractions from surface water for agriculture	-	B04 Clear-cutting, removal of all trees	M	D01 Roads, railroads, paths and related infrastructure (e.g. bridges, viaducts, tunnels)	H	D02 Electricity and communication infrastructure (e.g. phone lines, masts and antennas)	M	E01 Conversion from other land uses to housing and settlement areas (excl. drainage)	H
Pressure	Threat														
A16 Application of synthetic fertilisers	H														
A26 Abstractions from surface water for agriculture	-														
B04 Clear-cutting, removal of all trees	M														
D01 Roads, railroads, paths and related infrastructure (e.g. bridges, viaducts, tunnels)	H														
D02 Electricity and communication infrastructure (e.g. phone lines, masts and antennas)	M														
E01 Conversion from other land uses to housing and settlement areas (excl. drainage)	H														

<i>I02 Problematic native plants & animals</i>	H	H
<i>K04 Natural processes of eutrophication or acidification</i>	-	M

The impact of the pressure or threat should not be evaluated in relation to other pressures or threats (the high rank for the most important pressures and moderate for those which are less important) The impact of the pressure should reflect influence of a pressure or threat on conservation status of the species.

More detailed guidance on use of pressure/threats is provided in the notes in the list of pressures and threats available from the Reference Portal.

7.2 Sources of information

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

This is an optional field to provide any additional information on the nature of a certain pressure/threat. *(Examples to be provided).*

8 Conservation measures

This section contains information on conservation measures, including management plans, taken to maintain or to restore the habitat at favourable conservation status. The section contains a list of measures and their evaluation. The evaluation is provided in general and is not reported on a measure-by-measure basis.

8.1 Status of the measures

Select whether measures are needed or not. If the answer is yes, measures are needed then proceed to answer the following 3 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)

Examples of how to report on measures can be found in Section *(Reference to be updated)*

(More guidance to be provide where only a part of measures had been taken.)

8.2 Main purpose of the measures taken

Indicate the main prurpose of the measures taken. This part should only be filled in if the conservation measures had been taken (9.1b Measures identified and taken is marked YES) Even if several purposes may be identified, please indicate **only the main** one in terms of implementing the measure.

- 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

Indicate where the measures are mostly being implemented. This part should only be filled in if the conservation measures had been taken (9.1b Measures identified and taken is marked YES)

- a) Only inside Natura 2000
- b) Both inside and outside Natura 2000
- c) Only outside Natura 2000

8.4 Response to the measures

Provide an estimate of when the measures taken start, or are expected to start, to neutralize the pressure and to produce positive effects (with regard to the main purpose of the measures indicated in the field 9.2). 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 the main conservation measures

List a maximum of 10 conservation measures using the code that is provided on the reference portal²⁶

8.6 Additional information

Additional information to help understand the information given on conservation measures can be reported here. (*Examples to be provided*).

9 Future Prospects

This section provides information on future prospects of three parameters (range, area of habitat, structures and functions). Future prospects indicates 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 for the species).

9.1 Future prospects of parameters

For each parameter; range, area of habitat, structures and functions, indicate if the prospects are Good, Poor, Bad or Unknown. Prospects are considered good (if parameter is favourable and expected to remain favourable or is unfavourable but expected to improve) poor (if moderate deterioration is expected), bad (if serious deterioration is expected) or unknown. The expected trend in conservation status is a result of balance between reported pressures and threats and measures being taken.

An evaluation matrix is provided in Section (*Reference to be provided*).

²⁶ http://bd.eionet.europa.eu/activities/Reporting/Article_17/reference_portal_2019

9.2 Additional information

Additional information to help understand the how future prospects was assessed can be reported here (*Examples to be provided*).

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 Annex E matrix.

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).

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).

The status of range is favourable if short-term trend (field 4.3) 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).

The status of range is unfavourable bad if large decline equivalent to a loss of more than 1% per year within short-term trend period (field 4.2) has been observed or is expected, or range surface area (field 5.1) is more than 10% below favourable reference range (field 5.10).

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).

The status of area covered by the habitat is favourable if short-term trend (field 5.6) is stable (loss and expansion in balance) or increasing and surface area (field 5.2) is not smaller than the favourable reference area (field 5.13) and there are no significant changes in distribution pattern within range (if data available).

The fragmentation should be considered when evaluating the status of area covered by the habitat

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 Annex I habitat or habitat of an Annex II species). The habitat area could still be considered at Favourable Conservation Status, but in such cases give details in the field 10.8.

For dynamic habitats like shifting dunes the habitat area may have decreased during the short-term trend period (field 5.5), but due to dynamic nature of the habitat this do 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 the field 10.8.

The status of area covered by the habitat is unknown if there are no or insufficient reliable information available.

10.3 Specific structure and functions (including typical species – see below)

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).

The status of structure and functions is favourable if structures and functions (including typical species) are in good condition and there is no significant deteriorations / pressures.

(The evaluation matrix does not give any threshold for the favourable status of structure and functions. Although it is unrealistic to require 100% of the habitat type area to be good in order to be considered Favourable, the proportion should be high [can we agree a percentage - 90% ?²⁷])

It should be remembered that although not stated clearly in the evaluation matrix, the trend must be stable or increasing for Structure and functions to be considered Favourable, ie >90% in good condition but decreasing cannot be Favourable.)

The status of structure and functions is unfavourable bad if more than 25% of the area (fields 5.2 and 6.1) is unfavourable as regards its specific structures and functions (including typical species)

The status of structure and functions 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).

The status of future prospects is favourable if the prospects of habitat are excellent/good (field 9.1), no significant impacts from threats to the habitat are expected (field 7.1a and c) and the long-term viability of the habitat is assured.

The status of future prospects is unfavourable bad if the prospects of habitat are bad (field 9.1), if severe impact from threats is expected (field 7.1a and c) and its long-term viability is at risk.

The status of future prospects is unknown if there is no or insufficient reliable information available.

The prospects are assessed separately for three remaining parameters: range, area, structure and functions (field 10.1) and then combined together using the matrix in the Table 17.

Table 17: Combining evaluation of the three parameters to give Future prospects for a species

	Favourable	Unfavourable- Inadequate	Unfavourable-Bad	Unknown
--	------------	-----------------------------	------------------	---------

²⁷ Based on criteria C/D (Reduction in quality) for Vulnerable in the Red List of European Habitats (Janssen et al 2016)

	Favourable	Unfavourable- Inadequate	Unfavourable-Bad	Unknown
Future prospects	All parameters have good prospects OR prospects of one parameter unknown, the other prospects good	Other combination	One or more parameters have bad prospects	Two or more x and no parameter with bad prospects

10.5 Overall assessment of conservation status

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

10.6 Overall trend in Conservation Status

If the overall conservation status reported at 10.5 is either Favourable, 'Unfavourable - Inadequate' or 'Unfavourable – bad', indicate the trend (qualifier) as follows:

- + for improving conservation status trend
- - for deteriorating conservation status trend
- = for stable conservation status trend
- x for unknown conservation status trend

The qualifier should be based on trends over the reporting period (2013-2018). As the trends over reporting period are often not available, reported short-term trends (2007-2018) can be used to assess the trend in the conservation status, unless there is an 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 the field 10.8

See Section (*Reference to be updated*) on qualifying conservation status for more details.

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

To avoid potential misinterpretation and to clarify potential differences in conservation status (assessment and trend) between reporting rounds, indicate if there is a difference between reporting periods. If yes, provide the nature of that change. More than one option (a to d) can be chosen.

- a) genuine change
- b) improved knowledge or more accurate data
- c) use of a different method (including taxonomical change or use of different thresholds)
- d) if there is no information on nature of change.

Only the main reason for change should be reported. The change is mainly due to (select one of the reasons above):

- genuine change

- improved knowledge
- more accurate data
- the use of a different method.

If a Member State wishes to give further information, this can be done in field 10.8 'Additional information'.

10.8 Additional information

Additional information to help understand the information in fields 10.1 to 10.7. (*Examples to be provided*).

11 NATURA 2000 (pSCIs, SCIs and SACs) coverage for Annex I habitat types

This section provides information on surface area of habitat and trend of surface area in good conditions within the Natura 2000 network. The requested information should cover the proposed Sites of Community Importance (pSCIs), the Sites of Community Importance (SCIs) and Special Areas of Conservation (SACs) of the Natura 2000 network within the biogeographical/marine region concerned.

The information relates to all pSCIs/SCIs/SACs where the habitat is present, not only those sites, where the habitat is declared as a target species or a conservation objective.

11.1 Surface area of the habitat type

Indicate of 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 range 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 or 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 pSCIs, SCIs and SCAs network– method used

Use one of the following categories:

- a) Complete survey or a statistically robust estimate (*Examples to be provided*)
- b) Based mainly on extrapolation from a limited amount of data (*Examples to be provided*)
- 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, indicate the category for the most important source of data.

11.4 Surface area of the habitat type inside the pSCIs, SCIs and SCAs network - Direction

Trend is a (measure of a) directional change of a parameter over time. The trend of habitat area in good conditions should inform on changes in proportions between the habitat areas in good and not good conditions within the Natura 2000 network. Although rare in case of range of habitat area the 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:

- 0 = stable
- + = increasing
- - = decreasing
- u = uncertain
- x = unknown.

Short-term trend within the Natura 2000 network should be assessed over the period indicated in field 5.4.

11.5 Short-term trend of habitat area in good condition within the network of pSCIs, SCIs and SACs – Method used

Use one of the following categories:

- a) Complete survey or a statistically robust estimate (*Examples to be provided*)
- b) Based mainly on extrapolation from a limited amount of data (*Examples to be provided*)
- 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, indicate the category for the most important source of data.

11.6 Additional information

Additional information to help understand Natura2000 coverage can be reported here. (*Examples to be provided*)

12 Complementary information

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

12.1 Justification of % thresholds for trends

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

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