

Assessment and reporting under Article 12 of the Birds Directive

Explanatory Notes & Guidelines for the period 2008-2012

Final Version

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I ***INTRODUCTION***

Article 12 of the Birds Directive¹ states that:

1. Member States shall forward to the Commission every three years, starting from 7 April 1981, a report on the implementation of the national provisions taken under this Directive.

2. The Commission shall prepare every three years a composite report based on the information referred to in paragraph 1. That part of the draft report covering the information supplied by a Member State shall be forwarded to the authorities of the Member State in question for verification. The final version of the report shall be forwarded to the Member States.

Such reporting should make possible an assessment of whether the requisite measures have been taken to maintain the population of bird species referred to in Article 1 of the Directive, i.e. all species of naturally occurring birds in the wild state in the Member States' European territory, *'at a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements, or to adapt the population of these species to that level'*, in line with Article 2.

Until now, the reporting under Article 12 has primarily reflected the legal transposition and technical implementation on the national level². In early 2008 however it was agreed to start exploring *a new system of bird reporting* within the Expert Group of Reporting under the nature directives, which would improve the quality of reporting and deliver data on the actual state and trends of bird populations, similar to the reporting under Article 17 of the Habitats Directive. This would involve:

- A change from a primarily process-based exercise towards an outcome-oriented one, dealing primarily with status and trends of bird populations,
- A change from a 3-year to 6-year reporting cycle, reasonably synchronised with the reporting under Article 17 of the Habitats Directive, so that information is available in policy-relevant cycles and can give strong input to the overall biodiversity debate.

Between 2008 and 2011, the new reporting format under Article 12 was developed jointly by Member States, the Commission and contracted experts, to be used for a first reporting round under the new system by the end of 2013. This new format includes two parts:

1. *A general reporting format*, where some general progress reporting is retained but in a simplified manner, including basic facts and web-links to other sources for detailed information about e.g. legal transpositions and research or work done for the

¹ Council Directive 2009/147/EC; <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:020:0007:0025:EN:PDF>

² See http://ec.europa.eu/environment/nature/knowledge/rep_birds/index_en.htm

protection, management and use of bird populations. Textual reporting is kept to a minimum.

2. *A format for reporting on the size and trend of individual bird species' populations and distributions,* including sections for reporting on the main threats and pressures affecting species for which SPAs have been classified, as well as their coverage by the SPA network and conservation measures taken for them.

The *purpose* of this document is to provide guidance for Member States' reporting and to explain what is expected in the different parts of the format. The formats and the guidance document are complemented by the online "*Reference Portal*" (Appendix 1)³. The Reference Portal has been created to hold all relevant information needed to fill in the formats, including such things as tables of codes, checklist of species, etc.

³ http://biodiversity.eionet.europa.eu/activities/Article_12_Birds_Directive/reference_portal

II THE GENERAL REPORT FORMAT FOR 2008-2012

The general report format is 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 prepare one general report. It includes obligatory information about several provisions of the Birds Directive. In addition, the main achievements under the implementation of the Directive and the main measures taken to ensure coherence of the SPA network should be briefly described. The report should include information of relevance for the period 2008-12.

Language – any EU official language can be used. The reporting format tries to minimise the difficulties of using different languages by requesting numerical information wherever possible. However, the use of English is recommended as this gives the widest readership.

All internet addresses in the reporting fields should be given in full, including the initial <http://...>, if applicable.

Section 0. Member State

Select the 2 digit code for your country from ISO 3166; except that UK should be used instead of GB for the United Kingdom, according to the list to be found in the Reference Portal (see Appendix 1). No separate reports should be given for any subnational units.

Section 1. Main achievements under the Birds Directive

This section aims to inform the interested public about the main achievements under the Birds Directive and the SPA network in the respective Member State during the reporting period. The information should primarily be given in the national language (field 1.1), and if possible a translation into English (Section 1.2), as this information is likely to be of interest for readers in other Member States. Describe briefly the main achievements under the Birds Directive during the reporting period, with a special emphasis on the SPA network. This can include, for example:

- Demonstrated benefits for different species.
- Experiences of new or improved management techniques.
- Positive changes in public acceptance towards biodiversity protection.
- Improved cooperation between authorities, nature conservationists and other interest groups.
- Initiatives to combine establishment of Natura 2000 sites and the local economy.

- Measures taken in order to minimise impact on native bird species from invasive species, in line with the Invasive Alien Species strategy⁴.
- Information complementary to that given in Section 6 on research and work required as a basis for the management and use of bird populations. This might include suggestions for urgent research that requires EU coordination (e.g. via LIFE or FP funding).

The text should be maximum two pages. If a Member State wishes to add further documentation to that requested in this format, it should note these Annexes and their file-names at the end of this free text field and upload the relevant files to Reportnet together with the rest of the report.

Section 2. General information sources on the implementation of the Birds Directive – links to information sources of the Member States

This section aims to inform the interested public on where to find information relating to the Birds Directive and the SPA network in 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. multiple sources of information.

All fields should be reported, as follows:

- General information about the Birds Directive (field 2.1).
- Information about the SPA network in your Member State (field 2.2).
- Monitoring schemes (ref. Articles 4(1) and 10; field 2.3).
- Protection of species (ref. Articles 5-8; field 2.4).
- Transposition of the Directive (field 2.5).

Section 3. SPA classification (ref. Article 4)

Member States should provide this information on the SPA network at the national level:

- Number and total surface area (km²) of all SPAs (field 3.1).
- Terrestrial surface area (km²) of all sites (field 3.1.1).
- Number and total marine surface area (km²) of all marine sites (field 3.1.2).

Marine sites are any those which include an area of sea.

Marine area of sites is the area being below 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 adopted for the revised 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

⁴ http://ec.europa.eu/environment/nature/invasivealien/index_en.htm

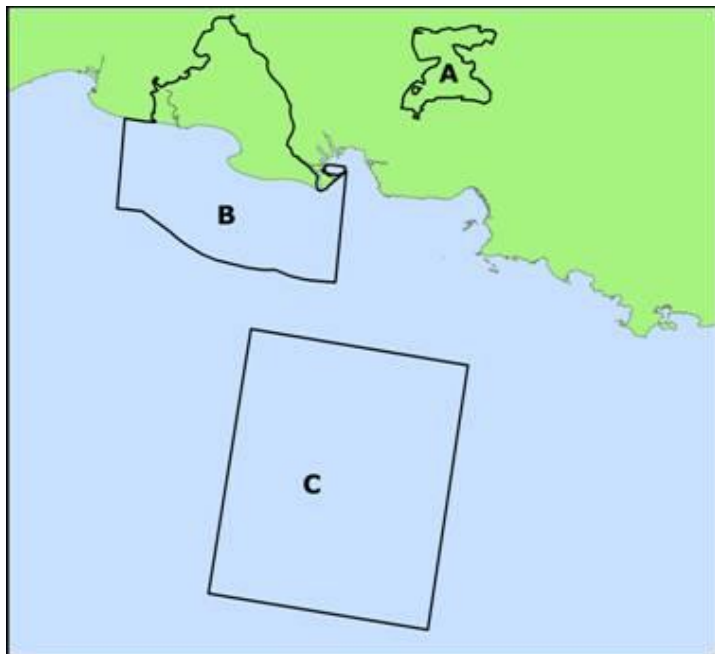
⁵ UN Convention on the Law of Sea (UNCLOS).

⁶ See Natura 2000 Reference Portal, http://bd.eionet.europa.eu/activities/Natura_2000/reference_portal.

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).

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

Member States are also asked to provide confirmation of the date of the latest update of the Natura 2000 database submitted to the Commission (field 3.2).



Terrestrial and marine Natura 2000 sites: A is a terrestrial site and all is terrestrial area. B is a coastal area, to be counted as a marine site which consists both of terrestrial area (green) and marine area (blue), to be reported under fields 3.1.1 and 3.1.2, respectively. C is a marine site and all is marine surface area.

Section 4. Comprehensive management plans for SPAs

While it is acknowledged that management plans are not a requirement under the Directive, this information is of special interest for understanding the instruments that Member States use to manage their SPA network, and also to find more specific information if needed.

In this context, 'comprehensive management plans' are considered as operational instruments that set practical measures to achieve the conservation objectives for the sites in the network. For this purpose, only 'comprehensive management plans' covering an entire SPA (or SPAs) and fulfilling the following minimum requirements should be reported:

- It should indicate the bird species and their localities for which conservation measures are planned.

- It should identify the actual status of the species and the desired status which should be reached through the conservation measures.
- It should define clear and achievable conservation objectives.
- It should identify the necessary measures together with the means and a time schedule which can contribute to meeting those objectives.

The information requested includes both the overall number of sites for which 'comprehensive management plans' have been proposed (field 4.1) and the percentage (%) of the network area covered by those management plans (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 plans. To put this number into context, the proportion of the SPA network area that is covered by such plans is also requested. In addition, Member States may report about the number of comprehensive management plans in preparation (field 4.3, optional).

Section 5. Measures taken in relation to approval of plans and projects (ref. Articles 6(4) and 7 of the Habitats Directive)

This section concerns projects and plans for which compensation measures were necessary during the reporting period. Any sites affected in this way should be listed, and the following information is requested for each of them⁷:

- site code;
- site name;
- title;
- year of the project/plan.

In addition, an optional field is available for Member States to describe the impact of such projects/plans on the status of bird species at the site (free text, maximum 250 characters). Repeat fields as necessary for each project/plan.⁸

Section 6. Research and work required as basis for the management and use of bird populations (ref. Article 10)

This section links to the obligation of Article 10(2) of the Birds Directive that Member States shall send the Commission any information required to enable it to take appropriate

⁷ For birds, there are no 'priority species' in the meaning of Article 6(4) of the Habitats Directive. Thus, the obligation to ask for the Commission's opinion before the approval of a plan or project does not apply for the SPAs, and there is no need of a field corresponding to 'Commission opinion requested' in the general reporting format for Article 17 of the Habitats Directive.

⁸ Further guidance on Article 6 of the Habitats Directive 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

measures for the research and work to be used as a basis for the protection, management and use of bird species. The information requested is limited to:

- National bird atlases published during the reporting period (field 6.1), with information about the year of publication and web-link or bibliographic reference.
- National bird monitoring overviews published during the reporting period (field 6.2), with information about the year of publication and web-link or bibliographic reference. Fields should be repeated if more than one overview has been published. There is also a possibility to provide a brief description (max. 500 characters) of e.g. species covered, main results, etc.
- National bird red lists published during the reporting period (field 6.3), with information about the year of publication and web-link or bibliographic reference.
- Other publications of EU-wide interest (e.g. national overview of action for threatened species) published during the reporting period (field 6.4), with information about the year of publication and web-link or bibliographic reference. Fields should be repeated if more than one overview has been published, and a maximum of 10 publications should be reported. There is also a possibility to provide a brief description (max. 500 characters) of e.g. species covered, main results, etc.

It is possible to insert more general relevant information about the implementation of Article 10 in a free text field under 'main achievements under the Birds Directive' in Section 1.

Section 7. Non-native bird species (ref. Article 11)

This reporting links to the obligation following from Article 11 that '*Member States shall see that any introduction of bird species which do not occur naturally in the wild state in the European territory of the Member States does not prejudice the local flora and fauna. In this connection they shall consult the Commission*'.

Each species should be reported, as follows:

- Species scientific (Latin) name (to be left not filled in if no introductions pursuant Article 11 have been consulted, decided or done during the reporting period).
- Subspecies, where relevant.
- Main contents of the legal decision for introduction; free text (max. 250 characters) and to include information about justification, number of individuals and duration.
- Date of consultation with the Commission.

III THE BIRD SPECIES STATUS AND TRENDS REPORT FORMAT

This species-wise report format comprises eight sections, as follows:

1. Species information.
 2. Population size.
 3. Population trend.
 4. Breeding distribution map and range size.
 5. Breeding range trend.
 6. Progress in work related to international Species Action Plans (SAPs), Management Plans (MPs) and Brief Management Statements (BMSs).
 7. Main pressures and threats.
 8. SPA coverage and conservation measures.
- Sections 1 to 5 should be completed for all species (or subspecific populations) and in the relevant seasons listed in the 'Complete checklist of species to be reported under the Birds Directive'⁹.
 - Section 6 should be completed only for the subset of these species with international SAPs, MPs or BMSs, as specified in the complete species checklist.
 - Sections 7 and 8 should be completed only for the subset of Annex I and key migratory species (or subspecific populations) listed in the 'Checklist of SPA trigger species'¹⁰.

All internet addresses in the reporting fields should be given in full, including the initial <http://>..., if applicable.

III.a Species and subspecific units to be reported

The Birds Directive applies to all species of naturally occurring birds in the wild state in the European territory of the Member States, as defined in Article 1, and Member States shall take the requisite measures to maintain the population of these species at a level which corresponds in particular to ecological, scientific and cultural requirements, or to adopt the bird populations to this level, in line with Article 2. Having this in mind, the reporting on bird species status and trends will include all species that meet the criterion of Article 1. However, the reporting on threats/pressures, the SPA network and conservation measures will only include so called 'SPA trigger species', e.g. in principle all species listed in Annex I of the Directive (ref. Article 4(1)) plus a selection of key 'migratory species' (ref. Article 4(2)).

⁹ The final version of the checklist will be made available from the Reporting Reference Portal (Appendix 1);

http://biodiversity.eionet.europa.eu/activities/Article_12_Birds_Directive/reference_portal.

¹⁰ A checklist of species triggering SPA classifications in each Member State has been drafted and consulted with Member States. The final version will be made available from the Article 12 Reporting Reference Portal (Appendix 1);

http://biodiversity.eionet.europa.eu/activities/Article_12_Birds_Directive/reference_portal

Two checklists for the species to be covered per Member State will be made available from the reporting Reference Portal (see Appendix 1):

- One checklist for reporting under Sections 1 to 5, identifying the species meeting the criteria of Article 1 of the Directive per Member State plus a selection of non-native species (see below). The list includes species with small or 'marginal' populations in the Member State territory but not occasional or vagrant species¹¹, as well as species that have become nationally extinct since around 1980 - this being a policy-relevant reference date, as the Birds Directive was adopted in 1979 and entered into force in 1981. However, Member States are also free to report on species that went nationally extinct earlier than 1980, if there is a reintroduction project underway or planned.
- Another checklist for the 'SPA trigger species', i.e. the subset of species for which additional information about threats/pressures and SPA coverage and conservation measures is required under Sections 7 and 8.

The species checklists will be reviewed and revised for each 6-year reporting period, in order to make it possible to reflect recent changes in species' distributions, including the establishment of newly arrived species.

Since the original Annexes of the Birds Directive were drafted, there have only been a few taxonomic revisions leading to splits of species listed therein to two or more species. But in general, wherever it is feasible (e.g. the different species can be distinguished in the field or are geographically separated) there should be one Article 12 report for each species currently recognised)¹².

Subspecific units: Reporting is to be split up with reference to subspecies or other subspecific units, such as distinct flyway populations, for a limited number of species, according to the following criteria:

- Subspecies identified in Annex I of the Birds Directive.
- Subspecies for which international Species Action Plans (SAPs), Management Plans (MPs) or Brief Management Statements (BMSs) have been drafted¹³. This includes not only those SAPs commissioned by the EU, but also those prepared under the Council of Europe (Bern Convention) and AEWA, to which all EU Member States are signatories anyway.
- Subspecies or distinct populations listed in Column A of Table 1 of the AEWA 'Status of the Populations of Migratory Waterbirds (2009-2012)'¹⁴.
- Subspecies or distinct populations of species classified as 'globally threatened' or 'near-threatened' according to the 2010 IUCN Red List¹⁵.

¹¹ For occasional or vagrant species, i.e. species that is currently only found occasionally within the MS's boundaries and does not have a stable or regular occurrence, a restrictive approach is applied.

¹² For example, the Annex I of the Directive lists *Oceanodroma castro*, but following a taxonomic revision this is now considered to be two species, *O. castro* and *O. montei*, and there should be separate reports for each of these taxa, as indicated in the species checklist.

¹³ For Species Action Plans and Brief Management Statements;

http://ec.europa.eu/environment/nature/conservation/wildbirds/action_plans/index_en.htm

For management plans for huntable species;

http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/managt_plans_en.htm.

¹⁴ <http://www.unep->

[aewa.org/documents/agreement_text/eng/pdf/aewa_agreement_text_2009_2012_table1.pdf](http://www.unep-aewa.org/documents/agreement_text/eng/pdf/aewa_agreement_text_2009_2012_table1.pdf).

- Other subspecies or distinct populations proposed by Member States during the consultation on the checklists – provided that all relevant Member States concerned agree to report on such subspecies/populations in the same way, to allow EU-level compilation/analysis.

The subspecific units to be covered are indicated in the above mentioned checklists.

Non-native species: In addition to species of naturally occurring birds in the wild state in the European territory of the Member States, as defined in Article 1 of the Birds Directive, the reporting also includes three non-native species listed in Annex II, i.e. Canada Goose (*Branta canadensis*), Ring-necked Pheasant (*Phasianus colchicus*) and Wild Turkey (*Meleagris gallopavo*).

Further, Member States have an option to report on a selection of non-native species of their own choice, and as identified in the species checklist (found in the Reference Portal).

Member States may also report on measures taken, e.g. to control invasive alien species in line with the Invasive Alien Species strategy¹⁶, under Section 1 of the General Report Format.

III.b How to report 'newly arriving' species

Several Member States have indicated that it is important to report species that are not yet established in their territory, but which have started to appear recently and may therefore colonise – due to climate, land use or other changes. Member States are encouraged to report such species, even if it is not possible to complete every detail of Sections 1 to 5 above¹⁷. If a newly arriving species is not listed in the Checklist for the Article 12 reporting for the Member State, e.g. due to an oversight when preparing the list, the Member State should still report it. Furthermore, with the revision of the checklists for each 6-year reporting period, it will be possible to include new arrivals, etc.

III.c Field-by-field guidance to fill in the format

Section 1. Species information

1.1 Member State

Select the 2 digit code for your country from ISO 3166, except that UK should be used instead of GB for the United Kingdom and that 4 digit codes is applied for a few subnational units, according to list to be found in the Reference Portal (Appendix 1).

¹⁵ <http://www.birdlife.org/datazone/species/index.html>; select 'search species' and then 'Europe' as region from the drop-down list, and tick the Red List categories CR, EN, VU and NT below.

¹⁶ http://ec.europa.eu/environment/nature/invasivealien/index_en.htm

¹⁷ However, obvious vagrants and occasional species should not be reported, as explained on previous page.

For a few Member States, separate reporting for subnational units is applied, with reference to the status of particular species or populations in distinct geographical areas. This will be applied for the Azores (Portugal), Madeira (Portugal), the Canary Islands (Spain) and Gibraltar (UK). Previous assessments¹⁸ have shown that many Macaronesian bird populations have a very different status and trends to those in Iberia, so separate reporting is valuable.

1.2 Species code

Use the EURING and Natura 2000 codes given in the species checklist in the Reference Portal. The unique EURING codes have been allocated to every species and subspecies in Europe (and many more besides) for the purposes of coordinating bird ringing, and are widely used¹⁹. The Natura 2000 codes are also used in the Standard Data form (SDFs) for individual Natura 2000 sites – new codes will be allocated to ensure that all species are covered.

1.3 Species scientific name

Use the names given in the complete species checklist in the Reference Portal (see Appendix 1). The Annexes of the Birds Directive do not list all the species it covers, so an alternative comprehensive source has been adopted²⁰ – the same source will be used for '*Birds in Europe 3*'.

1.3.1 Subspecific population

Use the populations given in the complete species checklist in the Reference Portal (Appendix 1). For details of the rationale explaining which subspecific populations should be reported, see above (Chapter III.a).

1.4 Alternative species scientific name (optional)

If the name given under 1.3 above differs from that in common national usage, Member States may enter an alternative here. Similarly, if the name of a species used in the Annexes of the Birds Directive differs from that in the complete species checklist in the Reference Portal, perhaps because of recent taxonomic studies, then the alternative name may be entered here²¹.

1.5 Common name (optional)

If a Member State wishes to enter the common name of the species (or subspecies) used in their country, it may do so here. This may be useful if the Member State wishes to circulate the draft report for comments to people who may not be familiar with the scientific name, or when communicating the report with the public.

¹⁸ Tucker, G.M. & Heath, M.F. (1994) *Birds in Europe: their conservation status*. - BirdLife International (BirdLife Conservation Series No. 3), Cambridge, UK.

BirdLife International (2004) *Birds in Europe: population estimates, trends and conservation status*. - BirdLife International (BirdLife Conservation Series No. 12), Cambridge, UK

¹⁹ Source file: http://www.euring.org/data_and_codes/euring_code_list/euring_code_tables.htm

²⁰ BirdLife International (2010) *The BirdLife checklist of the birds of the world, with conservation status and taxonomic sources. Version 3*. Downloaded from: <http://www.birdlife.org/datazone/info/taxonomy>

²¹ For example, *Phoenicopterus ruber* is now more commonly treated as *Phoenicopterus roseus* in Europe.

1.6 Season

Enter the season in which the data being reported were collected, with the options 'breeding', 'winter' and 'passage'. Member States should report on **all regularly occurring breeding species**, in order to allow an EU-wide picture of their population size and trend to be compiled. Member States should also report on **all regularly occurring wintering waterbirds**, especially migratory wildfowl (ducks, geese and swans) and waders (shorebirds), whose population size and trend are often best monitored in the winter, when they congregate in large numbers. Details on which species/populations that should be reported in which season by each Member State are set out in the complete species checklist in the Reference Portal. When reporting for more than one season is requested, separate forms should be used for each season.

In general, Member States are not required to report on species or populations on passage, because these data cannot be combined or used to draw conclusions about their overall population sizes or trends (due to the risk of multiple-counting). In some cases, however, **passage data are required for the subset of species whose passage occurrence triggers SPA classifications** in Member States, and for these species reporting is requested only under Sections 1, 7 and 8.²² These species are set out in the 'Checklist of SPA trigger species' in the Reference Portal.

Section 2. Population size

2.1 Year or period

Enter the year (e.g. 2009) or period (e.g. 2007-2010) when the population size was last determined. Many reports will involve periods, because the population size of most species is commonly estimated during national atlas projects, which usually involve several years of fieldwork. Where no recent atlas exists, however, Member States should try to report a more up-to-date figure, e.g. by recalculating the national population estimate using the results of annual monitoring schemes.

2.2. Population size

2.2.a Unit

Use the units specified per species/population in the complete species checklist in the Reference Portal. To allow the total EU population size of a species to be calculated, all Member States should report their national data using the same population unit. For the vast majority of **breeding** birds, numbers should be reported in units of **breeding pairs**, noting that the estimates for many species, including many common and widespread ones, are actually based on counts of the number of occupied territories during the breeding season. When the breeding population size is reported as 'breeding pairs', but the figures are derived from primary data field data collected using any other population unit (e.g. apparently

²² This includes cases where a Member State has classified SPAs for species on passage, although the Member State does not hold any breeding or wintering populations.

occupied nests, for some seabirds), this information should be given in field 2.8 ("additional information").

In a small minority of cases, involving species with an unusual or complex breeding biology or cryptic behaviour, other units (such as **calling males** or **lekking males**) are more appropriate than pairs for reporting population size. Such species might include various crakes, bustards, owls and grouse. The units for reporting the populations of such species are indicated in the complete species checklist, to be found in the Reference Portal.

For the **winter** season, and where relevant on **passage**, numbers should be reported using the unit of **individuals**. For species to be reported on 'passage', only information in Sections 1, 7 and 8 has to be provided.

2.2.b Minimum and 2.2.c Maximum

For most bird species, and in most Member States, exact estimates of the population size rarely exist, but more often assessments in terms of a range (minimum - maximum) or as a class (see proposed classes below) are available. Raw data should be entered, without any rounding, as any rounding needed will be done later at EU level. For those species for which the precise number of breeding pairs or wintering individuals is known, Member States should report the same value for 'minimum' and for 'maximum' (fields 2.2.a and 2.2.b). In cases where only very approximate population estimates are available, it is possible to use classes, as below, to be inserted in the 'maximum' and 'minimum' fields – in such cases, the quality of such estimates (see field 2.5 below) should be reported as '1 - Poor'.

Class	Population
1	0-50
2	50-100
3	100-500
4	500-1 000
5	1 000-5 000
6	5 000-10 000
7	10 000-50 000
8	50 000-100 000
9	100 000-500 000
10	500 000-1 000 000
11	1 000 000-5 000 000
12	5 000 000-10 000 000
13	10 000 000-50 000 000
14	50 000 000-100 000 000

2.3 Type of estimate

Enter one of the following options, which are derived from Baker *et al.* (2006)²³:

- **Best estimate** – the best available single figure or range, as derived from e.g. a national atlas project, a national census, compilation of regional figures, expert opinion, etc., but for which 95% confidence limits could not be calculated.
- **Five-year mean** – average min–max of published figures for rare breeding species; or five-year peak mean for non-breeding species, e.g. waterbirds.
- **95% CI range** – estimates derived from sample surveys in which 95% confidence limits could be calculated (cf. best estimate above).
- **Minimum** – for estimates where insufficient data exist to provide an accurate estimate, but where that given is known to be a considerable underestimate.

2.4 Method used

Enter one of the following options:

- **3 = complete survey or a statistically robust estimate.**
- **2 = estimate based on partial data with some extrapolation and/or modelling**, e.g. from sample surveys of parts of the population, using methods based on abundance and distribution data, or from an existing estimate using the most representative trend data available from relevant monitoring schemes.
- **1 = estimate based on expert opinion with no or minimal sampling**, i.e. consensus of those studying the species concerned.
- **0 = Absent data.**

2.5 Quality

Enter one of the following options, by making a judgement, combining the *reliability* of the estimate at the time it was made, how *recently* it was made, and the *method* used to derive it. The categories and descriptions below were used in two '*Birds in Europe*' assessments²⁴.

- **3 = good** – reliable quantitative data available (e.g. atlas, survey or monitoring data) for the whole period and country.
- **2 = moderate** – generally well known, but only poor, outdated or incomplete quantitative data available.
- **1 = poor** – poorly known, with no quantitative data available.

It may also be helpful to think about this in the way defined by Heath and Evans (2000)²⁵:

- 3 = reliable – accurate to within 10%.
- 2 = incomplete – accurate to within 50%.
- 1 = poor – definitely not accurate to within 50%.

2.6 Sources

To create the necessary audit trail for the data reported in fields 2.1 to 2.5 above, enter the details of the key references or other sources of information used to complete these fields.

²³ Baker, H., Stroud, D., Aebischer, N.J., Cranswick, P.A., Gregory, R.D., McSorley, C.A., Noble, D.G. & Rehfisch, M.M. (2006). Population estimates of birds in Great Britain and the United Kingdom. - British Birds 99: 24-44; <http://www.britishbirds.co.uk/wp-content/uploads/2010/10/APEP21.pdf>

²⁴ E.g. pages 5 and 14 in BirdLife International (2004) *Birds in Europe: population estimates, trends and conservation status*. - BirdLife International (BirdLife Conservation Series No. 12), Cambridge, UK

²⁵ Heath and Evans (2000, eds) *Important Bird Areas in Europe: Priority sites for conservation*. 2 volumes. - BirdLife International (BirdLife Conservation Series No. 8), Cambridge, UK.

Such sources may include published papers, unpublished data held in databases, websites, expert working groups, etc. The idea is not to create a long bibliography, but to provide enough information so that anyone reviewing the report (or updating it in 6 or 12 years time) will be able to understand the origin of the data being reported.

2.7 Reason for change (since previous report)

This field is not relevant now, but will become so in the 2019 reporting round and beyond. Member States should use it to indicate the likelihood that the difference (if any) between reported values on minimum and/or maximum numbers compared to the previous reporting round primarily reflects one of the following options:

- genuine change;
- improved knowledge or more accurate data;
- use of a different method to collect field data;
- use of a different method to process data (e.g. IT-tool).

It is quite a common phenomenon that a rare species attracts increased attention, so more people search for it and find it, causing the population size estimate to be revised and often substantially increased. At the same time, though, it may be clear that the species is actually declining, based on analyses of data from sites with reliable historical trends. This field allows a Member State to explain why, for example, its population size estimate has increased, even though it is reporting a population decline in Section 3 below. In case a Member State may report the *same* population figures in subsequent reports, although a genuine change has occurred, due to a change in methods, this might be reported in field 2.8 (below).

2.8 Additional information (optional)

This optional section leaves a possibility to provide complementary free text information (maximum 500 characters) of relevance with reference to the data provided for the assessment of population size under fields 2.1-2.7, e.g. details of any conversion factors used to convert field estimates of population size to 'breeding pairs' (see field 2.2.a).

Section 3. Population trend

3.1 Short-term trend (last 12 years) and 3.2 Long-term trend (since c. 1980)

Trend is a component to be reported both for population and range size, and it is an important parameter for assessing the status of species at national and EU scales. For this reporting exercise, two trend periods are considered: **short-term trends** (over the last 12 years), to assess current/recent developments; and **long-term trends** (since c. 1980), to assess progress since the Birds Directive was adopted and came into force.

Although the revised reporting period for the Birds Directive is 6 years, most data are only available for other time periods, and trend estimates are more likely to be statistically robust over longer time periods. Thus, it has been agreed to estimate the short-term trend over two reporting cycles, i.e. a rolling 12-year time window, to give more reliable estimates.

In all cases, the trend magnitude reported should be the percentage change over the relevant period (i.e. ideally 12 years for short-term trend and since c. 1980 for long-term trend).

3.1.1 Short-term trend period

The period for short-term trend is 12 years (2 reporting cycles). For the 2013 reports this means a period of 2001-2012 or a period as close as possible to this. Thus, some flexibility is permitted, so that while trends would ideally be reported 2001-2012, data from e.g. 1998-2009 will be accepted if the best available data relate to surveys in those years, or if using an earlier end point means that the national 'Article 12 report' can be delivered without delay and no later than December 2013. Indicate the period in this field.

3.1.2 Short-term trend direction

Indicate if population trend over the reported period was:

- 0 = Stable
- F = Fluctuating
- + = Increase
- - = Decrease
- x = Unknown

Fluctuating defines species whose average population level does not change (i.e. in the long-term), but which are characterised by large interannual variations in abundance, sometimes of one or two orders of magnitude. Species that typically show such dynamics include many boreal and arctic breeding species, such as some owls and crossbills, whose abundance is closely linked to the availability of food that shows cyclic peaks and troughs. As such, fluctuating is a very different trend category to stable. Indeed, species with small populations and ranges and whose numbers fluctuate are considered to be at a much higher risk of extinction than those with stable populations (IUCN 2001)²⁶.

3.1.3.a and b Short-term trend magnitude

If 'increase' or 'decrease' is reported in field 3.1.2, enter the percentage change in population size over the relevant period. This might be a precise figure (e.g. 27%), in which case the same value should be entered in both fields 3.1.3.a and 3.1.3.b, or a banded range (e.g. 20-30%), in which case the lower and upper limits should be entered in fields 3.1.3.a and 3.1.3.b, respectively. If the data come from a complete survey and/or exhaustive and statistically reliable sample scheme (i.e. category 3 under 3.1.4 Method used), the confidence interval (CI, often 95%) should be reported, entering the lower limit in fields 3.1.3.a and the upper limit in field 3.1.3.b.

3.1.4 Method used

Use one of the following categories:

- 3 = complete survey or a statistically robust estimate.
- 2 = estimate based on partial data with some extrapolation and/or modelling.
- 1 = estimate based on expert opinion with no or minimal sampling.
- 0 = absent data.

²⁶ IUCN (2001) *IUCN Red List categories and criteria*, <http://www.iucnredlist.org>

3.1.5 Quality

See field 2.5 above.

3.1.6 Sources

See field 2.6 above.

3.2.1 Long-term trend period

The ideal period to report long-term trends is from c. 1980 (when the Birds Directive was adopted/entered into force) until c. 2012. However, there is a little flexibility here, so if a Member State has (for example) conducted national censuses in 1980, 1995 and 2010, the trend between 1980 and 2010 should be reported. Indicate the period in this field. Member States lacking data from before 2000 could consult the two editions of '*Birds in Europe*²⁷', which present banded national trends for every species between 1970-1990 and 1990-2000.

3.2.2 Long-term trend direction

See field 3.1.2 above.

3.2.3 Long-term trend magnitude

See field 3.1.3 above.

3.2.4 Method used

See field 3.1.4 above.

3.2.5 Quality

See field 2.5 above.

3.2.6 Sources

See field 2.6 above.

3.3 Additional information (optional)

This optional section leaves a possibility to provide complementary free text information (maximum 500 characters) of relevance with reference to the data provided for the assessment of population trends under fields 3.1 and 3.2.

Section 4. Breeding distribution map and range size

Sections 4 and 5 apply only to those species to be reported in the **breeding season** in each Member State, as listed in the complete species checklist in the Reference Portal (Appendix

²⁷ Tucker, G.M. & Heath, M.F. (1994) *Birds in Europe: their conservation status*. - BirdLife International (BirdLife Conservation Series No. 3), Cambridge, UK.

BirdLife International (2004) *Birds in Europe: population estimates, trends and conservation status*. - BirdLife International (BirdLife Conservation Series No. 12), Cambridge, UK

1). National breeding bird atlases exist for most EU Member States, and the EBCC Atlas²⁸ combined these national data to map the breeding distribution of all species across Europe at a coarse scale (50x50 km grid; a new EBCC Atlas is being planned, to update this standard work). In contrast, very few countries have published national wintering bird atlases, and many birds are much more mobile in winter anyway. Hence, no winter data are requested.

Distribution versus range

For the reporting under Article 12 of the Birds Directive, 'range' is defined in the same way as for the reporting under Article 17 of the Habitats Directive, i.e. as 'the outer limits of the overall area in which a species is found at present. It can be considered as an envelope within which areas actually occupied occur'²⁹.

The difference between distribution and range is similar to that between area of occupancy (AOO) and extent of occurrence (EOO), terms which Member States will have encountered when applying the IUCN Red List criteria³⁰. In that system, EOO (range) is defined as the area contained within the shortest continuous imaginary boundary which can be drawn to encompass all the sites of present occurrence, while AOO (distribution) is defined as the area within the EOO that is actually occupied.

The range of a species is a parameter suitable for assessing the spatial aspects of its status, as it should be possible to describe and detect changes in the extent of the distribution. For this reporting, it is recommended to calculate the range size from the map of the actual breeding distribution (i.e. occurrences, field 4.3), using a **Range Tool** with a standardised algorithm (see Appendix 2). The standardised process will help to ensure repeatability of the range calculation in different reporting rounds. After automated calculation of range it is possible to correct the gaps resulting from incompleteness of data. The resulting range map will then be a combination of the automated procedure completed by expert judgement.

There is also an option to provide additional distribution maps (field 4.4) that deviates from the standard submission (field 4.3).

In addition to the distribution map, the range map produced by applying the Range Tool (and subsequent expert adjustment) should be provided (field 4.5). When a Member State prefers not to use the Range Tool to assess the range size, the alternative map used for this purpose should be provided as a reference. By providing range maps for consecutive reporting periods, it will also be possible to demonstrate any geographical range shifts and/or range fragmentation, even if the overall range size has not changed.

²⁸ Hagemeijer, E.J.M & Blair, M. (1997) The EBCC Atlas of European Breeding Birds: their distribution and abundance. Poyser; <http://www.ebcc.info/atlas.html> and <http://www.sovon.nl/ebcc/ea/>

²⁹ For the reporting under Article 17 of the Habitats Directive, the concept of 'natural range of species and habitats' was elaborated in some detail in an annex to a note of 15th March 2005 to the Habitats Committee (DocHab-04-03/03 rev.3, Annex F); http://circa.europa.eu/Public/irc/env/monnat/library?l=/habitats_reporting/reporting_2001-2007/reporting_framework&vm=detailed&sb=Title.

³⁰ <http://intranet.iucn.org/webfiles/doc/SSC/RedList/RedListGuidelines.pdf>

4.1 Year or period

Enter the year (e.g. 2009) or period (e.g. 2007-2010) when the breeding distribution was last determined. Many reports will involve periods, because the distribution of most species is commonly mapped during national atlas projects, which usually involve several years of fieldwork. Where no recent atlas exists, however, Member States should try to report a more up-to-date figure, by re-mapping the national distribution using other data, such as the results of annual monitoring schemes, web-gathered data, national or regional surveys, etc.

4.2 Sensitive species

Sensitive species are defined as those that are particularly subject to persecution, illegal hunting or collecting, and might face genuinely increased risks, detrimental to their conservation or management, if too detailed information about their distribution was made publically available. In a minority of cases, Member States may consider a species to be at risk if its distribution is made publically available at the standard 10x10 km grid scale requested (see Section 4.3). Indicating 'YES' here means that the 10x10 km map provided will be degraded before publication, so that the information is presented at a coarser scale (50x50 km). If the population is to be classified as 'sensitive' for only part of the Member State, this area should be delimited by the relevant longitudes and latitudes, which should be reported in field 4.11 (additional information).

4.3 Distribution map

Please, submit a distribution map in GIS format. The standard is **10x10 km ETRS grid, projection ETRS LAEA 5210**.³¹ Submit the map together with relevant metadata (projection, datum, scale). The map should show the breeding occurrence (i.e. presence or absence) of the species in each grid cell. As a general rule, only grid cells where breeding is 'confirmed' or 'probable' should be included; for definitions of breeding categories and codes, refer to Table 1 of the EBCC atlas³². However, in cases where survey coverage and data availability are known or thought to be poor, cells considered likely to hold breeding populations (especially common species) may be included as well, using common sense (see also Section 4.6 and Appendix 2).

4.4 Additional distribution map

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

Maps at a resolution other than 10x10 km may be reported here.

As for cases where grid-based distribution data cannot be transformed into distribution maps on a 10x10 km ETRS grid without introducing significant errors, the grid of the "additional

³¹ 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.

³² Hagemeijer, E.J.M & Blair, M. (1997, eds) The EBCC Atlas of European Breeding Birds: their distribution and abundance. Poyser.

distribution map" and consequently also the range map (field 4.5, both close to the 10x10 km) should be used for calculating the surface area for range (data field 4.6).

4.5 Range map

Please, submit a range map, using the same standard as for the distribution map under field 4.3 or 4.4. Submit the map together with relevant metadata (projection, datum, scale). The map should be prepared using a standardized method.

4.6 Range surface area

Total surface area of the current range in the Member State concerned, in km². It is recommended to use the 'Range Tool' to calculate the range size using the distribution map to be delivered under field 4.3 (see Appendix 2 for details). If not using the 'Range Tool', the surface area should be assessed with reference to the range map provided in field 4.5.

4.7 Method used

Use one of the following categories:

- 3 = complete survey or a statistically robust estimate.
- 2 = estimate based on partial data with some extrapolation and/or modelling.
- 1 = estimate based on expert opinion with no or minimal sampling.
- 0 = absent data (e.g. cases when a newly arriving species is not yet established).

4.8 Quality

Enter one of the following options, by making a judgement, combining the *reliability* of the distribution at the time it was mapped, how *recently* it was mapped, and the *method* used to map it (see section 2.5 for further guidance):.

- 3 = good
- 2 = moderate
- 1 = poor

It may also be helpful to think about this in the way defined by Heath and Evans (2000)³³:

- 3 = reliable – accurate to within 10%
- 2 = incomplete – accurate to within 50%
- 1 = poor – definitely not accurate to within 50%

4.9 Sources

To create the necessary audit trail for the data reported in fields 4.1 to 4.8 above, enter the details of the key references or other sources of information used to complete these fields. Such sources may include published papers, unpublished data held in databases, websites, expert working groups, etc. The idea is not to create a long bibliography, but to provide enough information so that anyone reviewing the report (or updating it in 6 or 12 years time) will be able to understand the origin of the data being reported.

³³ Heath and Evans (2000, eds) Important Bird Areas in Europe: Priority sites for conservation. 2 volumes. - BirdLife International (BirdLife Conservation Series No. 8), Cambridge, UK.

4.10 Reason for change (since previous report)

This field is not relevant now, but will become so in the 2019 reporting round and beyond. Member States should use it to indicate the likelihood that the difference (if any) between reported range surface area compared to the previous reporting round primarily reflects one of the following options:

- genuine change;
- improved knowledge or more accurate data;
- use of a different method to collect field data;
- use of a different method to process data (e.g. Range Tool).

4.11 Additional information (optional)

This optional section leaves a possibility to provide complementary free text information (maximum 500 characters) of relevance with reference to the data provided for the assessment of breeding range size under fields 4.1-4.10. For example, if a Member State wishes the information about a species to be treated as 'sensitive' (field 4.2) in only part of its national range, then the longitudes and latitudes to delimit this area should be given here.

Section 5. Breeding range trend

5.1 Short-term trend (last 12 years) and 5.2 Long-term trend (since c. 1980)

Trend is a component to be reported both for population and range size, and it is an important parameter for assessing the status of species at national and EU scales. For this reporting exercise, two trend periods are considered: **short-term trends** (over the last 12 years), to assess current/recent developments; and **long-term trends** (since c. 1980), to assess progress since the Birds Directive was adopted and came into force.

Although the revised reporting period for the Birds Directive is 6 years, most data are only available for other time periods, and trend estimates are more likely to be statistically robust over longer time periods. Thus, it has been agreed to estimate the short-term trend over two reporting cycles, i.e. a rolling 12-year time window, to give more reliable estimates

In all cases, the trend magnitude reported should be the percentage change over the relevant period (e.g. ideally 12 years for short-term trend and since c. 1980 years for long-term trend).

5.1.1 Short-term trend period

The period for short-term trend is 12 years (2 reporting cycles). For the 2013 reports this means a period of 2001-2012 or a period as close as possible to this. Thus, some flexibility is permitted, so that while trends would ideally be reported 2001-2012, data from e.g. 1998-2009 will be accepted if the best available data relate to surveys in those years, or if using an earlier end point means that the national 'Article 12 report' can be delivered without delay and no later than December 2013. Indicate the period in this field.

5.1.2 Short-term trend direction

Indicate if range trend over the reported period was:

- 0 = Stable
- F = Fluctuating
- + = Increase
- - = Decrease
- x = Unknown

5.1.3.a and b Short-term trend magnitude

If 'increase' or 'decrease' is reported in field 5.1.2, enter the percentage change in range surface area size over the relevant period. This might be a precise figure (e.g. 27%), in which case the same value should be entered in both fields 5.1.3.a and 5.1.3.b, or a banded range (e.g. 20-30%), in which case the lower and upper limits should be entered in fields 5.1.3.a and 5.1.3.b, respectively. If the data come from a complete survey and/or exhaustive and statistically reliable sample scheme (i.e. category 3 under 5.1.4 Method used), the confidence interval (CI, often 95%) should be reported, entering the lower limit in field 5.1.3.a and the upper limit in field 5.1.3.b.

5.1.4 Method used

Use one of the following categories:

- 3 = complete survey or a statistically robust estimate.
- 2 = estimate based on partial data with some extrapolation and/or modelling.
- 1 = estimate based on expert opinion with no or minimal sampling.
- 0 = absent data.

5.1.5 Quality

See field 4.8 above.

5.1.6 Sources

See field 4.9 above.

5.2.1 Long-term trend period

The ideal period to report long-term trends is from c. 1980 (when the Birds Directive was adopted/entered into force) until c. 2012. However, there is a little flexibility here, so if a Member State has (for example) conducted national atlas surveys around 1980, 1995 and 2010, the trend between 1980 and 2010 should be reported. Indicate the period in this field. Member States lacking data from before 2000 could consult the EBCC Atlas³⁴ or '*Birds in Europe*³⁵', which present banded national trends for every species between 1970 and 1990.

5.2.2 Long-term trend direction

See field 5.1.2 above.

5.2.3 Long-term trend magnitude

See field 5.1.3 above.

³⁴ Hagemeijer, E.J.M & Blair, M. (1997, eds) The EBCC Atlas of European Breeding Birds: their distribution and abundance. Poyser.

³⁵ Tucker, G.M. & Heath, M.F. (1994) Birds in Europe: their conservation status. - BirdLife International (BirdLife Conservation Series No. 3), Cambridge, UK.

5.2.4 Method used

See field 5.1.4 above.

5.2.5 Quality

See field 4.8 above.

5.2.6 Sources

See field 4.9 above.

5.3 Additional information (optional)

This optional section leaves a possibility to provide complementary free text information (maximum 500 characters) of relevance with reference to the data provided for the assessment of breeding range trend under fields 5.1 and 5.2. For example, a Member State may wish to report information about geographical range shifts (short-term or long-term), or fragmentation of the range, even though no changes in overall range size are reported.

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

This section is designed to capture information about Member States' work on some of the EU's most threatened bird species and for which Species Action Plans (SAPs) or Brief Management Statements (BMSs) have been developed, as well as a suite of huntable species considered to be in a poor condition in the EU and for which Management Plans (MPs) have been prepared³⁶. The reporting also includes work done within the framework of plans adopted by other international organisations to which the EU is a signatory part, such as the Bern Convention³⁷ and the AEWA³⁸.

Significant EU resources have been spent on the conservation of many of these species since the 1990s (e.g. through LIFE projects), so Member States are requested to summarise what they have done at national level to implement the plans and to improve the status of these species (as listed in the complete species checklist; Appendix 1).

For each species for which a SAP, BMS or MP has been developed, this section should be completed by all Member States for which any measures have been proposed in the plans.

6.1 Type of plan

Indicate if the species has a SAP, MP or BMS with actions proposed for your country. If so,

³⁶ http://ec.europa.eu/environment/nature/conservation/wildbirds/action_plans/index_en.htm for Species Action Plans and Brief Management Statements, and http://ec.europa.eu/environment/nature/conservation/wildbirds/hunting/managt_plans_en.htm for the Management Plan

³⁷

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

³⁸ <http://www.unep-aewa.org/publications/ssap/index.htm>

the remaining fields in this section should be completed.

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

Enter 'YES' or 'NO'; if 'YES', insert a web-link to the national plan.

6.3. If 'NO', describe the measures and initiatives taken pursuant the SAP / MP / BMS

Using maximum 250 characters, Member States should briefly outline what action they have taken for the species, preferably and when relevant using the code numbers³⁹ in the plans for recommended actions per Member State.

6.4. Sources of further information

In this field, Member States are requested to provide links to appropriate websites, references for relevant publications, contact details of responsible organisations, etc.

Section 7. Main pressures and threats

This section is designed to capture information about the principal factors responsible for causing individual species to decline, suppressing their numbers or restricting their ranges. **It should only be completed for species triggering SPA classifications**, i.e. species listed in Annex I of the Birds Directive, plus a selection of key migratory species for which SPAs have been classified per Member State, as identified in the 'Checklist of SPA trigger species' in the Reference Portal (Appendix 1).

In this context, *pressures* are considered to be factors that are acting now or which were acting during the reporting period, while *threats* are factors that are expected to act in the future. Often, the same impact acts both as a pressure and a threat, if it is having an impact now and this impact is likely to continue. Thus, for the reporting under Article 12 of the Birds Directive, **no distinction will be applied between pressures and threats** (which represents a difference to the reporting under Article 17 of the Habitats Directive).

It is recommended that the time span for *pressures* is the six years covered by the current reporting period (exceptionally, due to the change in reporting cycles, 2008-2012 for the current reporting round). For *threats*, the recommended time span is two reporting periods (i.e. 12 years) into the future, reporting only those impacts that are very likely to occur.

The reporting on impacts should be related to a standard checklist that is shared for the species reporting under both nature directives as well for the Standard Data Forms (SDFs) to be used for the individual Natura 2000 sites, and available via a reporting Reference Portal (Appendix 1). This checklist has been made compatible with similar lists used for reporting under the Water Framework Directive and for the Ramsar Convention, as well as the

³⁹ For most of the SAPs and BMSs, proposed actions have a numerical code.

proposals of Salafsky et al. (2008)⁴⁰. Special attention was paid to ensure that potential marine threats and pressures were included.

7.a Pressure/threat

Member States should list up to a **maximum of 20 factors**, using codes from the checklist of threats and pressures. The number is strictly limited to avoid reporting of very long lists of threats and pressures of possibly minor importance, and it is recommended to use the lowest number of possible data entries to adequately describe the situation. All factors reported are to be verified with sources in field 7e.

The checklist groups the threats and pressures under 17 headings (including 'X' for no pressures and threats, and 'U' for unknown) and has 75 categories at the 2nd hierarchical level. For the purpose of Article 12 of the Birds Directive, **reporting at the 2nd hierarchical level of the list should be used**, e.g. A01 Cultivation. However, Member States or users who need more precision are free to use the 3rd level and 4th level categories. Headings (code with a letter only) are not meant to be used for data entry, but only for a structured analysis of results in the national and composite report (except heading "X" for no pressures or threats).

If there are no threats or pressures, 'X' should be used to indicate 'no pressures or threats'. Unknown threat or pressure should be indicated by 'U'.

7.b Impact

The relative importance of each of the pressures and threats entered in field 7.a must be ranked in one of three categories:

- *H = High importance/impact*: Important direct or immediate influence, and/or acting over large areas.
- *M = Medium importance/impact*: Medium direct or immediate influence, mainly indirect influence, and/or acting over moderate part of the area/ regionally only.
- *L = Low importance/impact*: Low direct or immediate influence, indirect influence, and/or acting over small part of the area/ locally only.

The number of entries with the **highest rank (H) is limited to a maximum of 5 data entries**. This will make it possible to identify the most important factors at an EU scale.

7.c Quality of impact assessment

Enter one of these codes to describe the reliability of the impact score given in field 7.b:

- 3 = Good – e.g. evidence exists from experimental studies showing that the factor has an influence on the species.
- 2 = Moderate – e.g. correlational studies strongly indicate that the factor has an influence on the species, but its impact has not been tested.

⁴⁰ Salafsky, N., et al. 2008. A standard lexicon for biodiversity conservation: unified classifications of threats and actions. - Conservation Biology 22:897–911.

- 1 = Poor – e.g. expert opinion suggests that the factor could plausibly have an influence on the species, but without any evidence.

7.d Location

Having in mind that most bird species are migratory, or at least move over quite large areas during their annual cycle, status and trends reported in a particular Member State may reflect the effects of threats and pressures from outside the Member State or even from beyond the EU. The primary location of each reported impact should be indicated in this field as follows⁴¹:

- 4 = Inside the Member State
- 3 = Elsewhere in the EU
- 2 = Outside EU
- 1 = Both inside and outside EU
- x = Unknown

7.e Sources

To create the necessary audit trail for the data reported in fields 7.a to 7.d above, enter the details of the key references or other sources of information used to complete these fields. Such sources may include published papers, unpublished data held in databases, websites, expert working groups, etc. The idea is not to create a long bibliography, but to provide enough information so that anyone reviewing the report (or updating it in 6 or 12 years time) will be able to understand the origin of the data being reported.

Section 8. SPA coverage and conservation measures

This section is designed to capture information about the conservation measures taken for individual species by Member States, given the pressures and threats they face. As with Section 7 above, **it should only be completed for species triggering SPA classifications**, i.e. species listed in Annex I of the Birds Directive, plus a selection of key migratory species for which SPAs have been classified per Member State, as identified in the 'Checklist of SPA trigger species' in the Reference Portal (Appendix 1).

8.1 Population inside the SPA network

Under Article 4 of the Birds Directive, Member States are obliged to classify the most suitable territories in number and size as SPAs. In order to assess the extent of coverage of each relevant species by SPAs at EU level, Member States are requested to report the size of the national population that occurs within their national SPA network.

8.1.1 Population size

Estimate the total size of the population included **in the SPA network** at national level during the same period as reported in field 2.1 (including SPAs where the species is known to occur but is not classified as a qualifying interest or trigger species).

⁴¹ The four options here replace the XO and XE in the checklist for threats and pressures, i.e. these entries should not be used for the reporting under Article 12 of the Birds Directive.

a) Unit - use the same unit as reported in field 2.2.a. This will allow the system to automatically calculate the percentage (%) of the national population within SPAs, by comparing the following two fields with the national min-max population figures.

b) Minimum – use the same guidance as given in field 2.2.b.

c) Maximum – use the same guidance as given in field 2.2.c.

If needed to avoid over-inflated figures, Member States may need to adjust downwards the totals for some mobile wintering species, to allow for significant movements between SPAs.⁴²

8.1.2 Method used

Enter one of the following options (analogous with field 2.4):

- **3 = complete survey or a statistically robust estimate;**
- **2 = estimate based on partial data with some extrapolation and/or modelling** (e.g. from sample surveys of parts of the population, using methods based on abundance and distribution data, or from an existing estimate using the most representative trend data available from relevant monitoring schemes);
- **1 = estimate based on expert opinion with no or minimal sampling.,** i.e. consensus of those studying the species concerned;
- **0 = Absent data.**

8.1.3 Short-term trend of population size in the SPA network (on the national level) - optional

As in field 3.1.2, indicate if the population trend **in the SPA network** over the reported period (the same as that reported in field 3.1.1) was:

- 0 = Stable
- F = Fluctuating
- + = Increase
- - = Decrease
- x = Unknown

Reporting in this field is left optional for the period 2008-2012.

8.2 Conservation measures

Similar to reporting on pressures and threats in Section 7, Member States are requested to list conservation measures that they have taken (i.e. which are already being implemented) for the species during the current reporting period. This still applies only to those species on the checklist of SPA trigger species.

The main purpose of the reporting under this field is to obtain information to allow for a 'broad-brush' but informative overview of the measures taken inside and outside the Natura 2000 network, and with reference to importance and effectiveness. The current format and codified list of conservation measures (to be found in the Reference Portal, Appendix 1) aims to facilitate reporting in a more harmonised way and to promote further use of the data reported, namely as part of the process to evaluate the contribution of the SPA network to maintaining or improving the condition of bird species.

⁴² Might apply e.g. for various geese species wintering in North-western Europe.

8.2.1 Measure

List up to **maximum of 20 measures** taken during the reporting period, i.e. only measures that actually entered into force and were implemented during the reporting period should be reported, using codes from the list of conservation measures in the Reference Portal (Appendix 1). Measures identified as needed but not yet put into practice should not be listed. Fields 8.2.2 to 8.2.5 are to be filled in for each reported measure.

8.2.2 Type of measure

Tick the relevant type or types of measure:⁴³

- a) Legal/statutory
- b) Administrative
- c) Contractual
- d) Recurrent
- e) One-off

The set of measures under options a, b and c is normally more passive or deemed necessary to create an appropriate management framework.

The set of measures under options d and e includes continuous or recurrent management measures, like mowing, draining, controlling harmful species, etc. Continuous or recurrent means these measures have to be repeatedly implemented during the reporting cycle, while one-off measures are those that only have to be implemented once during the six-year reporting cycle.

8.2.3 Ranking

To help identify the most important measures at EU scale, a **maximum of five** of the measures reported should be indicated as the most important ones (H). The importance of each measure should be assessed in terms of the proportion of the population targeted by the measure – the larger the part of the population that has benefitted from the measure, the higher its importance.

8.2.4 Location

For each measure, indicate whether it primarily concerns or is primarily implemented inside the SPA network (tick for 'inside'); or if the measure is primarily applied outside the SPA network (tick for 'outside'), with reference to the proportion of the national population that has benefitted. If the measure is taken on approximately equal level both inside and outside the SPA network, with reference to the proportion of the national population, tick for 'both inside and outside'. This information will allow qualitative analyses of which measures tend to be associated with increasing populations, and which measures are better implemented within the SPA network or in the wider landscape.

⁴³ Statutory, administrative and contractual measures should be understood in the context of Article 6(1) of the Habitats Directive

8.2.5 Broad evaluation of the measure

This field is used to indicate in an approximate way the effectiveness of each measure in relation to the status and trends reported under previous sections. The following categories should be used (tick the most relevant case(s)):

- a) Maintain – when the conservation measure is required to maintain the population size on the present level and/or to prevent any declining trend.
- b) Enhance – when the conservation measure is required to increase the population size from a currently low level and/or to prevent a further declining trend – alone or in conjunction with other measures.
- c) Long-term – measure without short-term effect – one reporting cycle or less – but long-term positive effect in terms of increase of population size and/or turning a declining trend is expected.
- d) No effect – measure without effect or that needs adaptation and that is not delivering any conservation benefit; measure failed in achieving its objectives or had adverse effects.
- e) Unknown effect.
- f) Not evaluated - if the effect of the measure has not been evaluated.

QUICK REMINDERS

Absence of data

Fields not completed will be treated as meaning 'no data available' (the QA/QC will indicate this).

Format for numbers

- The decimal sign is either a point or a comma on the line.
- Numbers consisting of long sequences of digits can be made more readable by separating them into groups, preferably groups of three, separated by a small space (e.g. 10 000). For this reason, ISO 31-0 specifies that such groups of digits should never be separated by a comma or point, as these are reserved for use as the decimal sign.
- For numbers whose magnitude is less than 1, the decimal sign should be preceded by a zero, e.g. 0.25
- If a value is zero, enter '0'.

Based on ISO 31 on quantities and units (http://en.wikipedia.org/wiki/ISO_31-0).

Codes

The codes to be used for bird species, population units, threats and pressures and conservation measures can be found via the reporting Reference Portal; http://biodiversity.eionet.europa.eu/activities/Article_12_Birds_Directive/reference_portal (Appendix 1 for further information).

Web-links

All web-links/URL addresses should begin with <http://>....., if applicable.

File names

Do not include spaces, hyphens or punctuation marks (e.g. full stops, commas) in the file names.

The discussion papers used in the compilation of these guidelines can be found on CIRCA, see

http://circa.europa.eu/Public/irc/env/monnat/library?l=/expert_reporting/work-package_revision&vm=detailed&sb=Title

APPENDIX 1 :

MATERIAL AVAILABLE ON THE REFERENCE PORTAL

The Reference Portal contains reference documents and checklists for the reporting under Article 12 of the Birds Directive and Article 17 of the Habitats Directive, as well for the Standard Data Forms (SDFs) for the individual Natura 2000 sites. The portal is available via http://biodiversity.eionet.europa.eu/activities/Article_12_Birds_Directive/reference_portal.

For the reporting under Article 12 of the Birds Directive, the following documents are relevant:

Documentation

- 1) Reporting formats for the period 2008-2012
- 2) Explanatory notes and guidelines for the period 2008-2012.
- 3) Guidelines for submitting Article 12 data.

Reference material

- 1) Member States codes (ISO 3166 country codes; Section 0 of the general report format and field 1.1 of bird species status/trends format).
- 2) Checklist for bird species of Sections 1-6 of the status/trends report format (including details for various fields under section 1).
- 3) Checklist for 'SPA trigger species', to be covered under Sections 7-8 of the status/trends report format.
- 4) Population units (field 2.2.a of the species status/trends format).
- 5) Lists of threats and pressures (field 7.a of the status/trends report format).
- 6) List of conservation measures (field 8.2.1 of the status/trends report format).
- 7) The ETRS grids.

Further documents may be added if required.

APPENDIX 2:

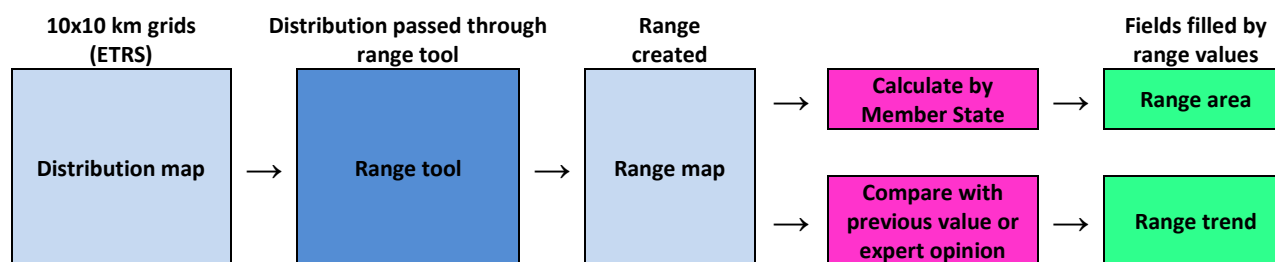
DISTRIBUTION MAPS AND THE RANGE TOOL

Submission of maps of the distribution of all bird species to be covered by the reporting in a Member State is a basic requirement of the Article 12 reporting. 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 habitats and species wherever possible.

The distribution maps should consist of 10x10km ETRS 89 grid cells in the ETRS LAEA 5210⁴⁴ projection. The gridded data sent should consist of the 10 km grid cells where the species is recorded as occurring; the use of attribute data to indicate the presence or absence of a species in a grid cell is not permitted.⁴⁵ The period over which the distribution data was collected should be included in the metadata following the INSPIRE guidelines.

The EEA will produce the grid cells to be used by each Member State in reporting. These grid cells will cover the entire extent of the Member State subject to the Article 12 reporting process. These will be available from the Article 12 Reporting Portal (see Appendix 1).

Geographical grids are an Annex I theme of the INSPIRE Directive⁴⁶. The INSPIRE specifications on Geographical grid systems define the ETRS 89 LAEA grid as the pan-European standard grid. For background information on why grids have been chosen in preference to polygons or points, see JRC-IES-LMU-ESDI (2004)⁴⁷.



Estimation of range and use of the estimate

⁴⁴ 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/geographicinformationstandards.html>

⁴⁵ 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.

⁴⁶ See <http://inspire.jrc.ec.europa.eu/> for more information on this Directive.

⁴⁷ JRC-IES-LMU-ESDI (2004) Short Proceedings of the 1st European Workshop on Reference Grids. http://eusoils.jrc.ec.europa.eu/projects/alpsis/Docs/ref_grid_sh_proc_draft.pdf

The range tool generates a standardised grid-based range using the rules discussed below. The tool uses two inputs to calculate the range. The first input is the distribution, which can be any spatial object (point, polygon or grid). The second input is the reference grid system. Both inputs need to be in the same projection. The tool is based on calculating the distances between the centroids of grid cells and then constructing a series of polyline and polygons to connect other centroids of grid cells based on the 'gap distance' specified. All cells that intersect these polyline and polygons, as well as all distribution cells, are used to create the range. A separate set of technical guidelines regarding the range tool will be developed in the future.

The standardised process consists of two principal steps:

- **Gap closure** using a predefined set of rules specifying when two distribution points/grids will be joined together to form a single range polygon, and where an actual gap in the range will be left. For birds, a discontinuity of 50 km has been defined as a gap in the range.
- **Fitting to environmental parameters** The polygons created by gap filling will be then fitted to environmental parameters to avoid the range covering areas which are not possible, for example the range of a terrestrial species including marine areas.

Although the distinction between suitable and unsuitable areas is very coarse, the purpose of fitting is to solve only most important contradictions resulting from automated calculation. The process of fitting should be simple and applicable across all Member States.

Metapopulations: Some bird species have a metapopulation structure, which is characterised by local extinctions and (re)-colonisations. Although it was previously stated that the range is a spatial generalisation of the actual species distribution, in these cases the range should represent the space which is used by metapopulation(s). Those localities with repeatedly recorded absence of the species but where the suitable habitat is still present and recolonisation possible should be included in the distribution map, as they form part of the area used by the metapopulation.

Incomplete distribution data: Some of the gaps in the distribution, as well in the range maps, are due to gaps in the data. After automated calculation of range it is possible to correct the gaps resulting from incompleteness of data. The resulting range map will then be a combination of the automated procedure and expert judgement.