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NOTE TO THE HABITATS COMMITTEE

**Subject: Assessment, monitoring and reporting of conservation status –
Preparing the 2001-2007 report under Article 17 of the Habitats
Directive (DocHab-04-03/03 rev.3)**

This paper summarises the discussion on the above mentioned topic in the Scientific Working Group (Habitats), the Habitats Committee and Workshops with Member States representatives. The paper proposes a reporting format, evaluation matrices, definitions of key terms and a process between Member States and the Commission to accompany that challenging process.

General context

Monitoring, indicators and reporting on state, trends and pressures on the components of biological diversity and related issues are required under EU policy and legislation, pan-European agreements and the UN Convention on biological diversity. A wide range of initiatives are being undertaken in this context.

The Habitats directive is one of the EU's most significant contributions to the aim of halting the loss of biodiversity by 2010 as set out by the EU Heads of State at the Gothenburg Summit in 2001. In the frame of the 2010 target and beyond the European Environmental Agency (EEA) is currently developing and implementing a set of biodiversity indicators in order to form a picture of overall biodiversity trends at EU level. Information gathered under the reporting requirements of the Habitats and Birds Directive will be important data sources for that work. It is therefore to be kept in mind that the work on monitoring, assessment and reporting of conservation status under the Habitats Directive is not only of importance in relation to the implementation of the directive itself but is a crucial building block for an overall biodiversity trends assessment in Europe and will consequently influence the strategic considerations which follow. Close coordination and mutual support of the various processes is therefore of importance and shall be guaranteed via the EEA and its Topic Centre on Biological Diversity (ETC-BD).

The legal framework under the Habitats Directive:

Monitoring of conservation status is an obligation arising from Article 11 of the Habitats Directive for all habitats (as listed in Annex I) and species (as listed in Annex II, IV and V) of Community interest. Consequently this provision is not restricted to Natura 2000 sites and data need to be collected both in and outside the Natura 2000 network to achieve a full appreciation of conservation status.

Article 11

Member States shall undertake surveillance of the conservation status of the natural habitats and species referred to in Article 2 with particular regard to priority natural habitat types and priority species.

The main results of this monitoring have to be reported to the Commission every six years according to Article 17 of the directive.

Article 17

1. 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. The report, in accordance with the format established by the committee, shall be forwarded to the Commission and made accessible to the public.

2. The Commission shall prepare a composite report based on the reports referred to in paragraph 1. This report shall include an appropriate evaluation of the progress achieved and, in particular, of the contribution of Natura 2000 to the achievement of the objectives set out in Article 3. A draft of the part of the report covering the information supplied by a Member State shall be forwarded to the Member State in question for verification. After submission to the committee, the final version of the report shall be published by the Commission, not later than two years after receipt of the reports referred to in paragraph 1, and shall be forwarded to the Member States, the European Parliament, the Council and the Economic and Social Committee.

3. Member States may mark areas designated under this Directive by means of Community notices designed for that purpose by the committee.

The purpose of monitoring conservation status and reporting:

The overall objective of the directive is to achieve and maintain favourable conservation status (FCS) for all habitats and species of Community interest and to contribute towards maintaining biodiversity of natural habitats and of wild fauna and flora in the European territory of the Member States. Monitoring must therefore lead to a clear picture of the actual conservation status and its trends on various levels and indicate the effectiveness of the directive in terms of approaching and reaching this objective. By doing so, monitoring, assessment and the reporting of results should:

- help assessing the effectiveness of management measures in Natura 2000 sites as well as other provisions of the directive
- assess the contribution of the directive to the broader biodiversity conservation policy (2010 target, biodiversity indicator work, *etc.*)
- provide background/guidance for setting priorities in conservation policy (on national and EU level)
- help setting priorities for further monitoring (on national and EU level)

- support the assessments made on the impact of plans and projects, which could have negative impacts on species, habitats and the Natura 2000 network.
- support the assessment of correct use of derogation schemes
- give indication in how far the annexes of the directive need adaptation (*e.g.* upgrading of species to priority status, deletion of species/downgrading, inclusion of a listed species in an additional annex)

Timing & character of the different reports

The Habitats directive defines a six-year cycle for reporting, with the second report covering the period between 2001 and 2006. This second report will have to include, on the best available information, a first assessment of conservation status for all species and habitats of Community interest.

To allow preparation of an EU wide report DG Environment has proposed that the 10 new Member States follow the same reporting timetable as the older Member States with a first report submitted in 2007. As for old Member States, new Member States should use all the available information on status and trends of species without regard to the 2004 accession date. The Commission recognises that the reports of new Member States may be less comprehensive although we would recommend that they participate as fully as possible in the conservation status assessments.

	Reporting period	National report (EU synthesis report)	Main focus
1.	1994 – 2000	2001 (2003/4)	Progress in legal transposition and implementation of the directive; progress in establishing the Natura 2000 network, administrative aspects.
2.	2001 – 2006	2007 (2008/9)	First assessment of conservation status based on best available data (based among others on trends and ideally in comparison with favourable reference values)
3.	2007 – 2012	2013 (2014/15)	<i>Renewed assessment of conservation status, based on established monitoring system. Assessment of effectiveness of measures taken under the directive.</i>

A process between Member States and the Commission

To accompany the work until national reports are due, it is proposed that the Scientific Working Group (SWG) under the Habitats Committee should play the role of a support mechanism in relation to all questions regarding conservation status assessment, monitoring and reporting. Obviously there will be need for further clarification and a further development of common understanding of certain concepts and definitions. Please find at the end of this paper a provisional list of tasks for the SWG and the ETC-BD. It is intended that this issue be a fixed item on the agenda of the group permitting discussions of progress, issues and questions on a regular basis. In view of the next (third) report the group should also start considering how the effectiveness of measures taken under the directive could be assessed.

Once MS have reported in 2007 to the Commission (for details see below), the Commission will compile the information and assess the situation from an EU perspective, which will include assessments at a biogeographical level. In order to provide a synthesis report, which will be as informative, scientifically sound and as clear as possible, it should be considered whether the consultation of MS about the draft report should take the form of a new “biogeographic process”, *i.e.* a round of seminars which would bring MS experts, independent experts, ETC-BD and Commission together to debate the draft conclusions of the EU-analysis, to correct/fine-tune results where necessary and discuss priorities for future actions. Such a process would also help to re-check quality of data, discuss transboundary issues where monitoring results from neighbouring regions seem not to match, favourable reference values, *etc.* In order to avoid a fairly resource and time demanding process, a streamlined approach by a single evaluation committee which could be special meetings of an extended scientific working group might be considered as an option. It will certainly be important that there is a broad debate of the results and their policy implications involving all Member States and all interested stakeholders.

Conservation status

The concept of ‘favourable conservation status’ (FCS) constitutes the overall objective to be reached for all habitat types and species of community interest. 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 do so in future as well. The fact that a habitat or species is not threatened (*i.e.* not faced by any direct extinction risk) does not mean that it is in favourable conservation status. The target of the directive is defined in positive terms, oriented towards a favourable situation, which needs to be defined, reached and maintained. It is therefore more than avoiding extinctions. Member States are expected to take all requisite measures to reach and maintain the objective of FCS.

Favourable Conservation Status is defined in general terms in Article 1e) (habitats) and 1.i) (species) of the Habitats Directive.

Article 1

(e) *conservation status of a natural habitat means the sum of the influences acting on a natural habitat and its typical species that may affect its long-term natural distribution, structure and functions as well as the long-term survival of its typical*

These definitions give a general orientation about which parameters are to be used (range, area occupied, *etc.*) when defining and assessing the status, and set the frame for more specific definitions on a species and habitat type level. It is important to note that the assessment of conservation status not only includes an element of ‘diagnosis’ based on current condition, but that there is also an important element of ‘prognosis’ (foreseeable future) based on known threats. Such foreseeable future

influences could be specific or general threats, positive or negative middle to long-term impacts (*e.g.* by trends in certain policies), *etc.* The prognosis element forms an integral part of the assessment result.

The concept of FCS is not limited to the Natura 2000 network. The definition of FCS for habitats and species in Article 1 indicates clearly that the *overall situation* of species and habitats needs to be assessed and monitored (see Article 11) in order to judge if it is favourable or not. To assess and evaluate the conservation status of habitats and species *within* the Natura 2000 network is not sufficient, especially when considering that the occurrences of most habitats and Annex II species are only partly covered by the network, and Annex IV and V species might not be covered at all.

There has been debate on whether the Natura 2000 network contributes to FCS for Annex I and II interests or is sufficient on its own. From the viewpoint of DG Environment, and confirmed by legal advice, the Habitats directive *as a whole* with all the instruments it provides for has the objective to reach favourable status (FCS) for all habitats and species listed in the annexes of the directive. This is spelled out in its Article 2.2. However for Annex I habitats and for species only listed on Annex II the Natura 2000 network is the only mechanism required by the directive. Results from monitoring & surveillance and from the “*periodical review of the contribution of Natura 2000 to the objectives set out in Article 2 and 3*” as foreseen in Article 9 of the Directive may show a need to adapt the network. Also such results may suggest the need to amend the annexes of the directive.

Defining favourable conservation status – working with favourable reference values & targets

It would be misleading to limit the criteria for determining favourable conservation status to recent (*e.g.* 6 year) trends & developments only. This would in some cases not give the correct picture. For example, if a species has steadily but slowly declined over a long time period and seems to have stabilised on a low level, this could not be considered as a species in favourable status. To look only at the “time-window” of a 6-year reporting period would in such (and other) cases not reflect correctly the situation of that species. Trends within the reporting period, in order to be interpreted correctly, should therefore be assessed in the context of clear, measurable reference values for favourable conservation status.

In addition to the information on trends, the assessment of conservation status will need to be done in relationship to favourable reference values which should be defined for

each species and habitat type depending on its specific situation. **Favourable reference values** (e.g. for range, area covered, population size) should be established on technical basis based on the best available conservation knowledge in a transparent way. 'Best expert judgement' may be used to define it in absence of other data.

Establishing favourable reference values must be distinguished from establishing concrete **targets**: setting targets would mean the translation of such reference values into operational, practical and feasible short-, middle- & long-term targets/milestones. This obviously would not only involve technical questions but be related to resources and other factors.

Member States are therefore encouraged to include favourable reference values in the 2007 report. The establishment of such values will support the discussions on status evaluation and priority setting on biogeographical level.

A common approach on **targets** was recommended by the **Thayatal/Austria workshop in October 2003** at both EU and member state level. The debate revealed that several member states have already embarked on the exercise on setting national targets and first lessons might be learned from that. From the presentations and discussions at this workshop following recommendations on how to set targets for favourable conservation status (on whatever level) could be distilled:

Targets shall...

- be based on the definitions given in the Habitats Directive
- be biologically meaningful (address the needs of species and habitats) and contribute to the required conservation of species and habitats in the EU
- be widely/easily understood
- be practical, quantifiable, measurable
- be realistic and accompanied by a plan (setting time lines for measures, milestones, etc.).
- be adjustable and take account of different conditions in different regions of the EU and of natural dynamic processes

Following the discussion above, it is clear that the situation at the moment when the directive came into force (1994) does not necessarily equal FCS. It is even unlikely that this is the case considering that the directive was established in order to react adequately to the decline and threat status of habitats and species in the EU (for example because of adverse influences, or because of too small population sizes for long-term survival). The time of 1994 might however be a practical reference point in time when evaluating trends in case data from around 1994 are available.

Monitoring

Monitoring (long-term systematic observation) is needed to track conservation status and its trends. Monitoring and assessments can be based on representative sampling or other data collection methods, the results of which can then be aggregated and evaluated at various spatial scales. It will probably be necessary for MS to design systems, which are based on existing practices and monitoring schemes accepting that different species groups and different habitat types will require fundamentally different approaches. Intensity of monitoring may depend on various factors: for example on management intensity (e.g. untouched forest => low frequency monitoring, regularly managed habitats => high frequency monitoring, e.g. integrated in management system), the extent/abundance of habitats/species in different regions, differences in 'typical species' of habitat types across the EU, etc. Monitoring at different intensities might be a way of keeping costs and resource-use reasonably low: a rather crude baseline monitoring if

species and habitats are in a good, stable situation, but once signs of problems show up (early warning approach), more intense monitoring should be applied in order to understand the extent of the problem and to react adequately.

The establishment of monitoring systems should take account of the favourable reference values to be reached for each species and habitat *i.e.* to monitor against the objectives a MS has set him. This might need the adaptation of ongoing monitoring schemes or the setting up of new structures.

While MS are free to choose their means and methods of gathering data and to adapt monitoring methods to regional differences, it must be stressed that a) monitoring of habitats and species as such is an obligation under the directive and b) that the data finally reported to the Commission need to be comparable and compatible in order to allow for analysis at an EU scale.

Initiatives on harmonisation of monitoring methods (incl. research projects like EU-Mon) and exchange of practices might however be discussed with the Habitats Committee and the Scientific Working Group.

Information to be reported to the Commission

General information

Annex A outlines the reporting format regarding general information.

Information on conservation status

Annex B and D outline the reporting format for conservation status of habitats (Annex I) and species (Annex II, IV, V).

Data reported to the Commission on conservation status of habitats and species have to include general context information such as range, area occupied, population size (or best available equivalent data) as well as information related to the results of the assessment of conservation status at a biogeographic level for each habitat and species of Community interest within the Member States concerned. They shall be reported to the Commission as a database (format to be agreed). This will allow the Commission to analyse the data in a meaningful way and produce a database and report that will be a valuable data-source for a wide range of nature conservation and biodiversity issues.

Being aware of the limitation of having all the requested information available the reporting format allows the option of “unknown”, however MS are asked to report as far as possible complete data sets, even if the data are not very reliable. The assumed quality of data can be indicated in the report.

The spatial scale of assessment should be the biogeographic region. However Member States are free to use more detailed assessment units if they wish. More detailed assessments could also be reported to the Commission under the condition that the joint reporting format is respected and an aggregation of data to the biogeographic level is possible (*i.e.* more detailed units should be sub-units of biogeographic regions).

As the objective of the upcoming 2007 report is a first assessment of conservation status, MS should focus their attention to give the best possible assessment of the situation as it is in 2006 *i.e.* at the time of producing the report.

The assessment matrix (per biogeographic region)

Annex C and E outline the assessment matrix for species and habitats.

To support and harmonise the MS assessment of conservation status per biogeographic region an evaluation matrix has been developed. The matrix lists the main criteria to be evaluated (as foreseen by the directive) and is based on a three grades system (favourable, inadequate and bad conservation status) or unknown (expressing a very severe lack of data).

The first assessment of conservation status should be based on the best information available at the moment of assessment and give a picture on the overall situation for the species or habitat. As for the trends, data close to the time of when the directive came into force (1994) might be used as reference situation if available but where this is not the case and trends over longer or shorter periods are available or make more sense to describe the status of a species or habitat, these should be reported on in this first assessment. For the sake of comparability, new Member States should also use as far as possible data from 1994 when estimating trends.

Populations should be seen as biological populations irrespective of political borders, so that *e.g.* marginal populations in one country/region should not be assessed as small/isolated if they mix genes with populations in neighbouring political areas. In such cases it is suggested that the two (or more) countries concerned undertake the assessment together although the results should be presented, in the context of the transboundary situation, by both.

Updated Standard Data Forms / Natura 2000 data-base

More or less regular updates of the SDF (Natura 2000 database) will be needed in future. In order to ascertain that they hold relevant up to date information for various purposes. Concrete procedures on when and how such updates should be made are to be agreed in the Habitats Committee.

Clarification of terms used

Natural range: see Annex F

Favourable reference range:

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; favourable reference value must be at least the range (in size and configuration) when the Directive came into force; if the range was insufficient to support a favourable status the reference for favourable range should take account of that and should be larger (in such a case information on historic distribution

may be found useful when defining the favourable reference range); 'best expert judgement' may be used to define it in absence of other data.

Favourable reference population (species):

Population in a given biogeographical region considered the minimum necessary to ensure the long-term viability of the *species*; favourable reference value must be at least the size of the population when the Directive came into force; information on historic distribution/population may be found useful when defining the favourable reference population; 'best expert judgement' may be used to define it in absence of other data.

Favourable reference area (habitat):

Total 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; favourable reference value must be at least the surface area when the Directive came into force; information on historic distribution may be found useful when defining the favourable reference area; 'best expert judgement' may be used to define it in absence of other data.

List of tasks to follow up in 2005/2006 with SWG and ETC-BD

- Develop a common understanding on how “favourable reference values” should be established and testing of this common understanding with practical examples (include principles in an ETC-BD guidance document to be elaborated together with SWG).
- Further clarification and guidance on how to work with the matrices and the reporting formats (Annex B, C, D, E), further elaboration of definitions (*e.g.* reference lists for threats and pressures, “typical species” for habitats) and examples (include in ETC-BD guidance document).
- Establishment of an electronic reporting format for conservation status (ETC & DG ENV)
- Accompany the progress made with the work in MS, testing of the method
- Investigate further synergies with other reporting obligations (*eg.* Birds Directive, Water Framework Directive)

Annexes

Annex A: General reporting format for the 2001-2006 report

Annex B: Reporting format for the conservation status of a species

Annex C: Evaluation matrix for the conservation status of a species

Annex D: Reporting format for the conservation status of a habitat type

Annex E: Evaluation matrix for the conservation status of a habitat type

Annex F: Definition of key terms: “Natural range”

Annex A

General reporting format for the 2001-2006 report

This second report will focus on a first assessment of conservation status of all habitats and species of Community interest. A full-scale reporting on active management measures and their impact on conservation status would therefore be premature and should start with the third implementation report. However, the reporting obligation in Article 17.1 covers more than just the conservation status of habitats and species of Community interest or the results of the surveillance (art.11).

As Member States have already started putting in place the necessary management tools, including management plans, for a large number of sites as well as other measures, the report should include concise and brief information on the progress made on this issue. There should be one national report per Member State, eventually consolidating the information contained in regional-level reports.

The table enclosed defines, which type of information the second implementation report should provide, in addition to the information related to the conservation status of habitats and species of Community interest. Some of the information is marked as "optional", i.e. Member States are free to decide if they wish to include information there or not. In addition, and although the information is available to the Commission through other instruments (legal transposition database, Natura 2000 database), the national reports should include, for the use by the general public, information on the legal framework and the implementation of Natura 2000.

Proposal of a data format:

1. Legal framework		
Legal texts	list of legal texts that transpose the Directive at national and/or regional level	Can be replaced by Internet address where this information is available, if that is the case
2. State of designation of Natura 2000		
Site designation	biogeographic region	
	number of sites of Community importance	Where appropriate give figures for both marine & terrestrial sites separately
	total area of sites of Community importance	Where appropriate give figures for both marine & terrestrial sites separately
	number of sites designated as special areas of conservation	Where appropriate give figures for both marine & terrestrial sites separately
	total area of special areas of conservation	Where appropriate give figures for both marine & terrestrial sites separately
3. Management tools (Art. 6(1))		
Management plans	number of sites for which comprehensive management plans have been adopted (with list of sites)	

	Number of sites for which comprehensive management plans are in preparation	optional
Management bodies	number of sites for which management bodies have been created (with list of sites and type of management bodies created)	
Other planning instruments	number of sites which do not have a dedicated management plan but for which nature conservation objectives have been included in the relevant territorial planning instruments (with list of sites and type of planning instruments used)	these may include land-use plans, forestry or agricultural plans, general territorial plans, etc.
Non-planning instruments (e.g. management agreements)	number of sites for which nature conservation objectives are not defined in a territorial planning instrument (dedicated management plan or other) but where other management instruments have been put in place (with list of sites and description of the types of instruments used)	
4. Conservation measures (Art. 6(1)) and evaluation of their impact on the conservation status (Art. 17(1))		
	general description of the main conservation measures taken (overview at national level, not detailed descriptions site by site)	
	impact of those measures on conservation status (general overview at national level, indicating species or habitats affected by the measures, impact on conservation status and area concerned)	optional
5. Measures to avoid deterioration of habitats /habitats of species & disturbance of species (Art. 6(2))		
	general description of the main measures taken (overview at national level, not detailed descriptions site by site)	
6. Measures taken in relation to approval of plans & projects (Art. 6(3, 4))		
	number of projects/plans for which compensation measures were necessary (with list of sites and types of projects concerned)	
	number of projects/plans for which a Commission opinion	

	was requested (with list of sites and types of projects concerned)	
	impact of projects in need of compensation measures on conservation status (general overview at national level indicating species or habitats affected by the projects, impact of the projects and of the compensations measures, separately if possible, area concerned and whether a follow-up of the compensation measures was carried out)	optional
7. Financing (Art. 8)		
	estimated total annual costs for managing Natura 2000 sites	optional
	measures essential for the maintenance or re-establishment at a favourable conservation status of the priority natural habitat types and priority species (overview at national level) – Art. 8(2)	optional
	estimated annual costs for measures covered by Art. 8(2)	optional
	co-financing provided by the EU for measures covered by Art. 8(2) (may be listed per habitat and species)	optional
8. Measures taken to ensure coherence of the Network (Art. 10)		
	general description of the main measures taken (overview at national level, not detailed descriptions site by site)	optional
9. Measures taken to establish a surveillance system (Art.11)		
	what are the main measures undertaken to establish a system to monitor the conservation status of natural habitats and species referred to in Art.2 of the directive?	
10. Measures taken to ensure the protection of species (Arts. 12 to 16)		
Measures taken for the strict protection of species (Articles 12, 13)	what are the requisite measures taken to establish a system of strict protection of Annex IV species? List them by group of species or by species if appropriate.	
	does a control system exist for the incidental capture and killing of species (Article 12(4)), which species are concerned	

	and how is it ensured that there will not be a significant negative impact on those species?	
Takings/exploitation (Articles 14, 15)	what are the general main measures established to deal with the taking/exploitation in the wild of specimens of wild species of Annex V? Which species are concerned (please list them)?	
	what type of control exists to ensure that indiscriminate means (see Article 15) of capture and killing of the species of Annex IVa) and Va) are not used?	
11. Supporting Measures and additional provisions		
Research (Art. 18)	general description of the main efforts and results obtained (identify major projects)	optional
(Re-)introduction of species (Art 22.a.)	Species name, EU-code	optional
	logical field (Yes/no) for successful reintroduction	optional, indicating if natural reproduction has already taken place and/or population is growing
	logical field for FCS	optional, indication if reintroduced species is already at FCS
Deliberate introduction of non-native species (art 22.b):	species introduced (Latin name)	optional
	list of species and/or habitats of Annex I,II or IV concerned	optional
	regulation measures taken to avoid threats/ damages	optional
Education & information (Art. 22 c)	general description of the main measures taken	optional

Reporting format on the 'main results of the surveillance under Article 11' for Annex II, IV and V SPECIES

Detailed technical specifications will be developed after agreement by the Habitats Committee in the frame of a guidance document to be elaborated by ETC-BD in cooperation with the SWG.

Data		Comments/Guidelines for reporting data
National Level		
Species code	Species code as used in as in Standard Data Forms, e.g. 1061	
Member State	The MS for which the reported data apply; use 2 digit ISO code	
Biogeographic regions concerned within the MS	Alpine (ALP), Atlantic (ATL), Boreal (BOR), Continental (CON), Mediterranean (MED), Macaronesian (MAC), Pannonian (PAN)	
Range	Range within the country concerned	
	Map	Attach a map as a GIS file – vector format or grid map – together with relevant metadata

Biogeographic level (complete for each biogeographic region concerned)		
Biogeographic region	Alpine (ALP), Atlantic (ATL), Boreal (BOR), Continental (CON), Mediterranean (MED), Macaronesian (MAC) or Pannonian (PAN)	
Published sources	If data given below is from published sources give bibliographic references or link to Internet site(s)	
Range	Range within the biogeographical region concerned (for definition, see Annex F, further specifications on how to measure range will be developed in the frame of the guidance document of ETC-BD)	
	Surface area	Total surface area of the range within biogeographical region concerned in km ²
	Date	Date (or period) when range surface area was determined
	Quality of data	3 = good 2 = moderate 1 = poor
	Trend	0 = stable + xx% = net increase by xx% – xx%= net loss by xx% If known provide magnitude of change in km ²
	Trend-Period	Give dates of beginning & end of the period for which the trend has been reported (e.g. 1981 to 1991)
	Reasons for reported trend	Assumed main reasons for change of range where known 0 = unknown 1 = improved knowledge/more accurate data 2 = climate change 3 = direct human influence (restoration, deterioration, destruction) 4 = indirect anthropo(zoo)genic influence 5 = natural processes 6 = other (specify)
Population		
	Distribution map	Presence/absence, use GIS based map – vector format or grid map
	Population size estimation	Total population in biogeographic region of the country concerned (data or best estimate) - number of individuals or other relevant surrogate (e.g. pairs, breeding males, number of colonies or localities)
	Date of estimation	Date (or period) when population size was determined
	Method used	3 = from complete inventory 2 = extrapolation from surveys of part of the population, sampling 1 = based on expert opinion

Quality of data	3 = good 2 = moderate 1 = poor
Trend	0 = stable + xx% = net increase by xx% – xx% = net loss by xx% If known provide magnitude of change in number of individuals or other relevant surrogate in the biogeographic region
Trend-Period	Give dates of beginning & end of the period for which the trend has been reported
Reasons for reported trend	Assumed main reasons for change of populations where known 0 = unknown 1 = improved knowledge/more accurate data 2 = climate change 3 = direct human influence (restoration, deterioration, destruction) 4 = indirect anthropo(zoo)genic influence 5 = natural processes 6 = other (specify)
Justification of % thresholds for trends	In case a MS is not using the indicative suggested value of 1% per year when assessing trends, this should be duly justified in this free text field
Main pressures	List main pressures impacting on the species and/or its habitat(s) in the past or at the moment (past/present impacts) Use codes from Appendix E to the Standard Data Forms to 2 nd or 3 rd level (<i>these may need to be revised in the near future</i>) E.g. 160 General Forestry management, 167 Exploitation without replanting
Threats	List threats affecting long term viability of the species and/or its habitat(s) (future/foreseeable impacts) Use codes from Appendix E to the Standard Data Forms to 2 nd or 3 rd level (<i>these may need to be revised in the near future</i>)
Habitat for the species	
Area estimation	Estimate of area in km ²
Date of estimation	Date (or period) when habitat area surface was determined
Quality of data	3 = good 2 = moderate 1 = poor
Trend	0 = stable + = net increase – = net loss
Trend-Period	Give dates of beginning & end of the period for which the trend has been reported
Reasons for reported trend	Assumed main reasons for change of species habitat where known 0 = unknown 1 = improved knowledge/more accurate data 2 = climate change 3 = direct human influence (restoration, deterioration, destruction) 4 = indirect anthropo(zoo)genic influence 5 = natural processes 6 = other (specify)
Future prospects	Is the species viable in the long term? 1 = good prospects 2 = poor prospects 3 = bad prospects

Complementary information	
Favourable reference range	In km ² (+vector or grid map if feasible); See definition in DocHab-04-03/03 rev.3
Favourable reference population	Number of individuals or other relevant surrogate (e.g. pairs, breeding males, number of colonies or localities), see definition in DocHab-04-03/03 rev.3
Suitable Habitat for the species	Give area of suitable habitat in km ² - area of habitat which the species could potentially occupy (if available):
Other relevant information	
Conclusions <i>(assessment of conservation status at end of reporting period)</i>	
Range	Favourable (FV) / Inadequate (U1) / Bad (U2) / Unknown (XX)
Population	Favourable (FV) / Inadequate (U1) / Bad (U2) / Unknown (XX)
Habitat for the species	Favourable (FV) / Inadequate (U1) / Bad (U2) / Unknown (XX)
Future prospects	Favourable (FV) / Inadequate (U1) / Bad (U2) / Unknown (XX)
Overall assessment of CS¹	Favourable (FV) / Inadequate (U1) / Bad (U2) / Unknown (XX)

¹ A specific symbol (e.g. arrow) can be used in the unfavourable categories to indicate recovering populations

Assessing conservation status of a SPECIES

General evaluation matrix (*per biogeographic region within a MS*)

Parameter	Conservation Status			
	Favourable ('green')	Unfavourable - Inadequate ('amber')	Unfavourable - Bad ('red')	Unknown (insufficient information to make an assessment)
Range¹	Stable (loss and expansion in balance) or increasing <u>AND</u> not smaller than the 'favourable reference range'	Any other combination	Large decline: Equivalent to a loss of more than 1% per year within period specified by MS <u>OR</u> more than 10% below favourable reference range	<i>No or insufficient reliable information available</i>
Population	Population(s) above 'favourable reference population' <u>AND</u> reproduction, mortality and age structure not deviating from normal (if data available)	Any other combination	Large decline: Equivalent to a loss of more than 1% per year (indicative value MS may deviate from if duly justified) within period specified by MS <u>AND</u> below 'favourable reference population' <u>OR</u> More than 25% below favourable reference population <u>OR</u> Reproduction, mortality and age structure strongly deviating from normal (if data available)	<i>No or insufficient reliable information available</i>
Habitat for the species	Area of habitat is sufficiently large (and stable or increasing) <u>AND</u> habitat quality is suitable for the long term survival of the species	Any other combination	Area of habitat is clearly not sufficiently large to ensure the long term survival of the species <u>OR</u> Habitat quality is bad, clearly not allowing long term survival of the species	<i>No or insufficient reliable information available</i>
Future prospects (as regards to population, range and habitat availability)	Main pressures and threats to the species not significant; species will remain viable on the long-term	Any other combination	Severe influence of pressures and threats to the species; very bad prospects for its future, long-term viability at risk.	<i>No or insufficient reliable information available</i>
Overall assessment of CS²	All 'green' <u>OR</u> three 'green' and one 'unknown'	One or more 'amber' but no 'red'	One or more 'red'	Two or more 'unknown' combined with green or all "unknown"

¹ Range within the biogeographical region concerned (for definition, see Annex F, further guidance on how to define range (e.g. scale and method) will be given in a foreseen guidance document to be elaborated by ETC-BD in cooperation with the SWG.

² A specific symbol (e.g. arrow) can be used in the unfavourable categories to indicate recovering populations

Reporting format on the 'main results of the surveillance under Article 11' for Annex I Habitats Types

Detailed technical specifications will be developed after agreement by the Habitats Committee in the frame of a guidance document to be elaborated by ETC-BD in cooperation with the SWG.

Data		Comments/Guidelines for reporting data
National level		
Habitat Code		From Annex I of the Habitats Directive, e.g. 1110 (do not use subtypes)
Member State		The MS for which the reported data apply; use 2 digit ISO code
Biogeographic region concerned within the MS		Alpine (ALP), Atlantic (ATL), Boreal (BOR), Continental (CON), Mediterranean (MED), Macaronesian (MAC), Pannonian (PAN)
Range		Range within the country concerned
	Map	Attach a map as a GIS file – vector format or grid map – together with relevant metadata;

		Biogeographic level (complete for each biogeographic region concerned)
Biogeographic region		Alpine (ALP), Atlantic (ATL), Boreal (BOR), Continental (CON), Mediterranean (MED), Macaronesian (MAC) or Pannonian (PAN)
Published sources		If data given below is from published sources give bibliographic references or link to Internet site(s)
Range		Range within the biogeographical region concerned (for definition, see Annex F, further specifications on how to measure range will be developed in the frame of the guidance document of ETC-BD)
	Surface area	Total surface area of the range within biogeographical region concerned in km ²
	Date	Date (or period) when range was determined
	Quality of data	3 = good 2 = moderate 1 = poor
	Trend	0 = stable + xx% = net increase by xx% – xx% = net loss by xx% If known provide magnitude of change in km ²
	Trend-Period	Give dates of beginning & end of the period for which the trend has been reported (e.g. 1981 to 1991)
	Reasons for reported trend	Assumed main reasons for change of range where known 0 = unknown 1 = improved knowledge/more accurate data 2 = climate change 3 = direct human influence (restoration, deterioration, destruction) 4 = natural processes 5 = indirect anthropo(zoo)genic influence 6 = other (specify)
Area covered by habitat		Area covered by habitat within the range in the biogeographic region concerned (km ²)
	Distribution map	Presence/absence, use GIS based map – vector format or grid map
	Surface area	In km ²
	Date	Date (or period) when area surface was determined
	Method used	3 = ground based survey 2 = based on remote sensing data 1 = based on expert opinion

Quality of data	3 = good 2 = moderate 1 = poor
Trend	0 = stable + xx% = net increase by xx% – xx% = net loss by xx% If known provide magnitude of change in km ²
Trend-Period	Give dates of beginning & end of the period for which the trend has been reported
Reasons for reported trend	Assumed main reasons for change of area covered where known 0 = unknown 1 = improved knowledge/more accurate data 2 = climate change 3 = direct human influence (restoration, deterioration, destruction) 4 = natural processes 5 = indirect anthropo(zoo)genic influence 6 = other (specify)
Justification of % thresholds for trends	In case a MS is not using the indicative suggested value of 1% per year when assessing trends, this should be duly justified in this free text field
Main pressures	List main pressures impacting on the habitat in the past or at the moment (past/present impacts) Use codes from Appendix E to the Standard Data Forms to 2 nd or 3 rd level (<i>these may need to be revised in the near future</i>) E.g. 160 General Forestry management, 167 Exploitation without replanting
Threats	List threats affecting long term viability of the habitat (future/foreseeable impacts) Use codes from Appendix E to the Standard Data Forms to 2 nd or 3 rd level (<i>these may need to be revised in the near future</i>)
Complementary information	
Favourable reference range	In km ² + map (vector or grid map); See definition in DocHab-04-03/03 rev.3
Favourable reference area	In km ² ; See definition in DocHab-04-03/03 rev.3
Typical species	List the typical species used and describe method used to assess their status.
Other relevant information	
Conclusions <i>(assessment of conservation status at end of reporting period)</i>	
Range	Favourable (FV) / Inadequate (U1) / Bad (U2) / Unknown (XX)
Area	Favourable (FV) / Inadequate (U1) / Bad (U2) / Unknown (XX)
Specific structures and functions (incl. typical species)	Favourable (FV) / Inadequate (U1) / Bad (U2) / Unknown (XX)
Future prospects	Favourable (FV) / Inadequate (U1) / Bad (U2) / Unknown (XX)
Overall assessment of CS¹	Favourable (FV) / Inadequate (U1) / Bad (U2) / Unknown (XX)

¹ A specific symbol (e.g. arrow) can be used in the unfavourable categories to indicate recovering habitats

Assessing conservation status of a HABITAT type

General evaluation matrix (*per biogeographic region within a MS*)

Parameter	Conservation Status			
	Favourable ('green')	Unfavourable – Inadequate ('amber')	Unfavourable - Bad ('red')	Unknown (insufficient information to make an assessment)
Range¹	Stable (loss and expansion in balance) or increasing <u>AND</u> not smaller than the 'favourable reference range'	Any other combination	Large decrease: Equivalent to a loss of more than 1% per year within period specified by MS <u>OR</u> More than 10% below 'favourable reference range'	<i>No or insufficient reliable information available</i>
Area covered by habitat type within range²	Stable (loss and expansion in balance) or increasing <u>AND</u> not smaller than the 'favourable reference area' <u>AND</u> without significant changes in distribution pattern within range (if data available)	Any other combination	Large decrease in surface area: Equivalent to a loss of more than 1% per year (indicative value MS may deviate from if duly justified) within period specified by MS <u>OR</u> With major losses in distribution pattern within range <u>OR</u> More than 10% below 'favourable reference area'	<i>No or insufficient reliable information available</i>
Specific structures and functions (including typical species³)	Structures and functions (including typical species) in good condition and no significant deteriorations / pressures.	Any other combination	More than 25% of the area is unfavourable as regards its specific structures and functions (including typical species) ⁴	<i>No or insufficient reliable information available</i>
Future prospects (as regards range, area covered and specific structures and functions)	The habitats prospects for its future are excellent / good, no significant impact from threats expected; long-term viability assured.	Any other combination	The habitats prospects are bad, severe impact from threats expected; long-term viability not assured.	<i>No or insufficient reliable information available</i>
Overall assessment of CS⁵	All 'green' OR three 'green' and one 'unknown'	One or more 'amber' but no 'red'	One or more 'red'	Two or more 'unknown' combined with green or all "unknown"

¹ Range within the biogeographical region concerned (for definition, see Annex F, further guidance on how to define range (e.g. scale and method) will be given in a foreseen guidance document to be elaborated by ETC-BD in cooperation with the SWG.

² There may be situations where the habitat area, although above the 'Favourable Reference Area', has decreased as a result of management measures to restore another Annex I habitat or habitat of an Annex II species. The habitat could still be considered to be at 'Favourable Conservation Status' but in such cases please give details in the Complementary Information section ('Other relevant information') of Annex D.

³ A definition of typical species will be elaborated in the frame of the guidance document by ETC-BD in cooperation with the SWG.

⁴ E.g. by discontinuation of former management, or is under pressure from significant adverse influences, e.g. critical loads of pollution exceeded.

⁵ A specific symbol (e.g. arrow) can be used in the unfavourable categories to indicate recovering habitats

ANNEX F:

THE NATURAL RANGE OF SPECIES AND HABITATS UNDER THE HABITATS DIRECTIVE

elaborated in the frame of the Scientific Working Group under the Habitats Committee, based on a version dealing with animal species from the article 12 working group

The term "natural range" appears in various places in the text of the Directive and in different contexts. A definition of the term must therefore take account of the directive as a whole.

1. Context

Many species and habitats of Community interest listed in the annexes of the Habitats Directive have historically suffered decreases and fragmentation of their natural range and some continue to do so. Today's natural range of some species and habitats of Community interest may in a good number of cases be insufficient to guarantee their maintenance on a long term basis. This was among other reasons one important factor in their identification as species of Community interest. The natural range and its trends is therefore one element that needs to be considered when judging the conservation status of a species or habitat. It also should be considered when elaborating conservation measures and restoration strategies and objectives. The achievement of favourable conservation status as described in art.1(i) of the directive for species and art. 1(e) for habitats should be kept in mind.

2. Definition - a dynamic concept

The natural range describes roughly the spatial limits within which the habitat or species occurs. It is not identical to the precise localities or territory where a habitat, species or sub-species permanently occurs. Such actual localities or territories might for many habitats and species be patchy or disjointed (*i.e.* habitats and species might not occur evenly spread) within their natural range. If the reason for disjunction proves to be natural *i.e.* caused by ecological factors, the isolated localities should no be interpreted as continuous natural range, for example for an alpine species the range may be the Alps and the Pyrenees, but not the lower area between. The natural range includes however areas that are not permanently used: for example for migratory species "range" means all the areas of land or water that a migratory species inhabits, stays in temporarily, crosses or overflies at any time on its normal migration¹. Vagrant or occasional occurrences (in the meaning of accidental, erratic, unpredictable) would not be part of the natural range.

Natural range as defined here is not static but dynamic: it can decrease and expand. Natural range can also be in an unfavourable condition for a habitat or a species *ie.* it might be insufficient to allow for the long-term existence of that habitat or species.

When a species or habitat spreads naturally (on its own) to a new area/territory or when a re-introduction of a species consistent with the procedures foreseen under art. 22² of the Habitats

¹ See also article 1 of the Bonn Convention

² The term "native" as used in Article 22 should be interpreted in a way that a species or habitat should be considered native, when it is within its natural range (as defined in this paper), or within the limits of any historical or potential (to where it spreads naturally) natural range.

Directive has taken place of a species into its former natural range, this territory has to be considered a part of the natural range. Similarly restoration/recreation or management of habitat areas, as well as certain agricultural and forestry practices can contribute to the expansion of a habitat or a species and therefore its range. However, individuals or feral populations of an animal species introduced on purpose or accidentally by man to places where they have not occurred naturally in historical times or where they would not have spread to naturally in foreseeable future, should be considered as being outside their natural range and consequently not covered by the directive.

Example *Hucho hucho* (Danube salmon, covered by Annex II and V). This species naturally occurs in the Danube river basin. All occurrences (natural or re-introduced) within the Danube river basin, where it used to occur widely before its decline, are therefore part of the natural range of this species. Occurrences in other European river basins (eg. Rhine), where the species was introduced by man do not form part of the natural range of the species.

In order to help with the practical work of defining range, one may refer to the IUCN definition (see IUCN red list categories and criteria, Version 3.1) of “extent of occurrence”: Extent of occurrence is defined as the area contained within the shortest continuous imaginary boundary which can be drawn to encompass all the known, inferred or projected sites of present occurrence of a taxon, excluding cases of vagrancy. ***Further guidance on the practical application of the concept will be given in the guidance document to be elaborated by ETC-BD in cooperation with SWG.***

3. Changes in natural range

The Directive makes it clear that natural range is dynamic: it may increase or decrease over time. Natural range may alter for a number of reasons. Natural reasons include for example changing climatic conditions, the successions of habitats or the exploitation of a new food resource by an animal species. Some of these reasons may be considered as natural responses to environmental conditions or natural variation in the characteristics of species, over which we have no influence.

But other range changes are and have been in the past clearly associated with human interventions (or discontinuation of former interventions) in the natural environment. These are likely to be the consequence of major modifications to the environment resulting from its management by human populations, for example changes in the extent and types of agricultural and forest land, modifications to water courses from barrages, fragmentation of habitats and natural areas by transport systems, or direct extermination. Such type of range changes, where they have detrimental effects (i.e. lead to regression of range) on habitats or species of Community interest are in contradiction to the aims of the directive ie. to maintain or restore habitats and species of Community interest at a favourable conservation status. But human intervention can also lead to positive range changes: as the directive is not only dealing with natural, but also with semi-natural habitat types like for example hay-meadows and certain semi-natural forests-types, human intervention (for example the expansion of certain agricultural or forestry practices) can contribute to an enlargement of the natural range of an Annex I habitat type.

In order to evaluate range changes & trends (eg. for monitoring purposes or conservation management), reference points in time may be useful. One reference point to evaluate trends under the Habitats Directive (therefore also evaluating the effectiveness of the directive) might be the date of entry into force of the directive. This assumes however that member states have comprehensive quality data for this date, which unfortunately will not always be the case. In practical terms we will need to use the best quality data, which is available for the first assessment of conservation status. We must remember however that with regard to the overall objective of the directive we cannot assume that the actual natural range of 1994 or of any other date since then represents automatically a favourable condition. Natural range might be too small to allow for a long-term existence of its habitat or species.