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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE AND NATURAL HABITATS

Group of Experts on Protected Areas and Ecological Networks

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THE EMERALD NETWORK A NETWORK OF AREAS OF SPECIAL CONSERVATION INTEREST FOR EUROPE

INFORMATION DOCUMENT

Document established by the Directorate of Culture and Cultural and Natural Heritage This document explains how the Emerald Network was born, its characteristics, its reach and development, and its relation with Natura 2000 and the Pan-European Ecological Network.

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1. Introduction

In June 1989 the Standing Committee of the Bern Convention held an extraordinary meeting exclusively devoted to habitat conservation within the Convention. At the meeting the Committee adopted an interpretative resolution [Resolution No. 1 (1989) on the provisions relating to the conservation of habitats] and three operative recommendations [Recommendations Nos. 14, 15 and 16 (1989)] aimed at the development of a network of areas under the Convention. A further recommendation [Recommendation No. 25 (1991) on the conservation of natural areas outside protected areas proper] was adopted at a later meeting of the Committee. All relevant resolutions and recommendations mentioned in this paper appear in its appendices.

In Recommendation No. 16 (1989) "on Areas of Special Conservation Interest" (ASCIs), the Standing Committee recommended Parties to "take steps to designate Areas of Special Conservation Interest to ensure that the necessary and appropriate conservation measures are taken for each area situated within their territory or under their responsibility where that area fits one or several of the following conditions..." (a list of conditions followed).

The Committee had wished that all these recommendations on habitat conservation be rapidly implemented by Contracting Parties but two major events delayed their implementation. The first was the fundamental change in the political map of Europe that followed the fall of the Berlin wall in October 1989. The Bern Convention had to change its priorities from the building of a network of areas to the extension of the Convention to the new democracies of Central and Eastern Europe. The second was the preparation, at the European Community, of a legal instrument aimed at implementing the Bern Convention within the Community. (As any other Contracting Party to the Convention, the European Community had the obligation to take "the appropriate and necessary legislative and administrative measures" to implement the Convention.) The legal instrument was finalised in May 1992 and was called the "Directive on the conservation of natural habitats and of wild fauna and flora". Happily, that text did not simply take the text of the Bern Convention, but went much further in developing the obligations on habitat protection (so much that it is now best known as the "Habitats Directive"). The Habitats Directive created "a coherent European ecological network of special areas of conservation ... to be set up under the title of Natura 2000".

In order to assure coherence between the network of Areas of Special Conservation Interest (ASCIs) to be designated under the Bern Convention and the network of Special Areas of Conservation (SACs) designated under the Habitats Directive, the Standing Committee to the Convention thought preferable to wait for the establishment of the proper mechanism by the Directive. In January 1996, a sufficient number of States of Central and Eastern Europe had become Parties to the Convention and were requesting the development of the network of ASCIs. The Standing Committee, realising this wish and noting that the Habitats Directive was already sufficiently advanced in its work to build Natura 2000, decided to adopt its Resolution No. 3 (1996), in which it resolved to "set up a network (Emerald Network) which would include the Areas of Special Conservation Interest designated following its Recommendation No. 16"; it furthermore "encouraged Contracting Parties and observer states to designate Areas of Special Conservation Interest and to notify them to the Secretariat". Resolution No. 3 (1996) was, in a sense, a second act of birth of the network, after its first creation in 1989. More precisely it was an act of baptism as the network had not been given a name in 1989 and it had proved rather awkward to promote a network under the name of "network to develop Recommendation No. 16 (1989) of the Standing Committee of the Convention on areas of special conservation interest". Short names have advantages.

2. Legal support of the Emerald Network

The Bern Convention does not deal exclusively with the protection of species. Articles 1, 2, 3, 4, 6 and 9 of the Convention deal with the protection of natural habitats, in particular:

- Habitats of the wild flora and fauna species (specially those in Appendices I and II);
- Endangered natural habitats;
- Areas of importance for migratory species.

Relevant texts of the Convention and the Standing Committee concerning protection of natural habitats are appended to this document.

The Emerald Network was created by virtue of Recommendation No. 16 (1989) and Resolution No. 3 (1996) and thus benefits from the "soft law" approach characteristic of recommendations. Nevertheless, the obligations to protect the habitats of species and endangered natural habitats are not "soft law" but rather strict obligations clearly marked in the Convention, and forming part of international law. The Standing Committee recommended Contracting Parties to implement their obligations regarding natural habitats through the taking of a number of measures, among which the designation of the Areas of Special Conservation Interest (ASCIs) that form the Emerald Network. Obviously obligations under the Bern Convention can only be requested from Contracting Parties. Other European states were "invited" to participate in the exercise. As for member States of the European Union (which are all Contracting Parties to the Convention), Resolution No 5 (1998) concerning the Rules for the Network of Areas of Special Conservation Interest stipulates that "for contracting parties which are Member States of the European Union Emerald Network sites are those of the Natura 2000".

3. Areas of special conservation interest (ASCIs)

What are Areas of special conservation interest?

Recommendation No. 16 defines Areas of Special Conservation Interest as those designated by states where that area fits one or several of the following conditions:

- a. it contributes substantially to the survival of threatened species, endemic species, or any species listed in Appendices I and II of the convention;
- b. it supports significant numbers of species in an area of high species diversity or supports important populations of one or more species;
- c. it contains an important and/or representative sample of endangered habitat types;
- d. it contains an outstanding example of a particular habitat type or a mosaic of different habitat types;
- e. it represents an important area for one or more migratory species;
- f. it otherwise contributes substantially to the achievement of the objectives of the convention.

It must be stressed that for Contracting Parties which are member States of the European Union the procedures established in the Birds Directive and Habitats Directive will be those to apply so that criteria for choice of those areas will be those of the Directive (which are largely the same criteria anyway).

The conditions above point clearly towards areas of a great ecological value for both the threatened and endemic species listed in the Appendices of the Bern Convention and for the endangered habitat types which have been identified by the Standing Committee as "requiring specific conservation measures".

The Emerald Network would thus not be simply a box, into which any type of protected area can be put, or a mere collection of areas designated under other schemes. Its coherence – much like that of Natura 2000 – comes from the limited criteria for choice: they have to be important and contribute substantially (the adjective is important!) to the objectives of the Convention.

Which States may designate ASCIs?

Resolution No. 3 (1996) encourages "Contracting Parties and observer states to designate ASCIs" and to notify them to the Secretariat.

The following 45 European States are Contracting Parties to the Convention:

Albania, Andorra, Armenia, Austria, Azerbaijan, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, 'The former Yugoslav Republic of Macedonia', Turkey, Ukraine, United Kingdom;

The following 4 European states have the status of observer at the meetings of the Standing Committee: Belarus, Holy See, the Russian Federation, San Marino.

The participation of non-European Parties in the Emerald Network was decided by the Standing Committee in 1998. Four African states are Contracting Parties to the Convention: Burkina Faso, Morocco, Tunisia and Senegal. This raises to 53 the number of States, which may participate in the Emerald Network.

The participation of States, which are not yet Contracting Parties, is not only possible, but highly desirable. Resolution No. 3 (1996) invites "European states, which are observer States in the Standing Committee of the Bern Convention, to participate in the network and designate ASCIs".

Resolution No. 5 (1998) establishes that for Contracting Parties that are member States of the European Union, Emerald Network sites are those of the Natura 2000. Indeed no further action would be expected from them, the Natura 2000 network having identical objectives (and a more solid legal basis) to those of the Emerald Network. In this respect, the full and thorough implementation of the Habitats Directive is contemplated as a necessary and fundamental step into the achievement of the common goals it shares with the Bern Convention, both concerning the protection of natural habitats and the conservation of wild flora and fauna.

What are the duties of states concerning the status and management of ASCIs?

Once ASCIs have been designated by the states, that is not the end of the Emerald Network, but rather the start, as states are recommended to take a number of steps (by legislation or otherwise), to ensure that ASCIs are properly managed. They are asked in Recommendation No. 16 (1989) to "ensure, wherever possible that":

- a. ASCIs "are the subject of an appropriate regime, designed to achieve the conservation of the factors" responsible for the designation of the area;
- b. "the agencies responsible for the designation and/or management and/or conservation of ASCIs have available to it sufficient manpower, training, equipment and resources (including financial resources) to enable them properly to manage, conserve and survey the areas;
- c. Appropriate ecological and other research is conducted, in a properly co-ordinated fashion, with a view to furthering the understanding of the critical elements in the management of ASCIs and to monitoring the status of the factors giving rise to their designation and conservation;
- d. Activities taking place adjacent to such areas or within their vicinity do not adversely affect the factors giving rise to the designation and conservation of those sites."

Furthermore, the States are recommended to take steps, as appropriate, in respect of ASCIs to:

- "a. Draw up and implement management plans which will identify both short- and long-term objectives (such management plans can relate to individual areas or to a collection of areas such as heathlands);
- b. Regularly review the terms of the management plans in the light of changing conditions or of increased scientific knowledge;
- c. Clearly mark the boundaries of ASCIs on maps and, as far as possible, on the ground;
- d. Advise the competent authorities and landowners of the extent of ASCIs and their characteristics;
- e. Provide for the monitoring of ASCIs and especially of the factors for which their conservation is important."

It is obvious from the paragraphs above that states are invited to pay much conservation attention to ASCIs. There is, however, no precise recommendation to give legal protection to ASCIs, the Standing Committee having preferred to keep a supple wording and having recommended that the areas "be subject to the appropriate regime". As usual the Standing Committee was more interested by the achievement of conservation results than by a particular "area protection" procedure. Some systems may work very well without strong legal obligations attached. In any case the Standing Committee asked states to look into the matter of the protection of ASCIs and the last point of Recommendation No. 16 reads as follows:

The Standing Committee recommends that Contracting Parties:

"5. Determine those areas which remain inadequately provided for under existing mechanisms and improve the conservation status of such areas, using whatever mechanisms are appropriate in order to meet the requirements of the convention."

Resolution No. 5 has a more precise wording: "The governments are asked to inform the Secretariat of any important changes likely to affect negatively in a substantial way the ecological character of the designated ASCIs or the conditions having justified their designation. Where any such changes come to light, the Standing Committee may advise the government concerned on steps to be taken to ensure conformity with the provisions of Recommendation No.16 (1989)".

Building the Emerald Network is designed to be a dynamic process, which will need regular updates of the information contained and the way the states comply with the recommendation. Parragraph 2 of Recommendation No. 16 invites states to "review regularly or continually in a systematic fashion their performance in the implementation of [the designation of ASCIs]."

How are ASCIs designated?

Resolution No. 3 (1996), Recommendation No. 16 (1989) and Resolution No. 5 (1998) provide the fundamental basis for the designation of ASCIs. They encourage Contracting Parties and observer States "to designate ASCIs and to notify them to the Secretariat". Thus the responsibility for designating ASCIs lies with the government of the States concerned. As for the technical details, it is worth noting that Resolution No. 3 created "a group of experts to carry out the necessary activities related to the building up of the network".

The Group of experts has agreed in principle that the designation process would be done in such a way that it would be compatible with that of the Natura 2000 Network. Resolution No.5 (1998) establishes the procedure, which the governments should follow in designation of sites for the Emerald network.

In order to designate an ASCI, any government should deposit a standard Data Form with the Secretariat of the Council of Europe, that will register the designation. A Standard data form is based on the database designated for Natura 2000. The data has been modified to cover the larger geographical area and more numerous species of the Bern Convention. The forms can be filled in electronically and the software allows for the semi-automatic transfer of information gathered by other projects such as the CORINE-biotopes programme.

In accordance with the 'Rules for the Emerald Network', the Standing Committee has the right to advise the government concerned to designate one or more areas of particular interest to the Network. If a government designates an area, which does not meet the criteria, the Standing Committee may advice the government to withdraw the designation. If the government nevertheless maintains the designation, the Standing Committee may decide not to accept it.

The Standing Committee thought that, for the designation of ASCIs and for the protection of natural habitats, it was necessary to reinforce the work that Contracting Parties were carrying out in habitat protection. Thus, it decided to ask Parties (in Recommendation No. 14 (1989)) to:

- "1. Identify in the areas within their jurisdiction:
 - a. Species requiring specific habitat conservation measures;
 - b. Endangered natural habitats requiring specific conservation measures;
 - c. Migratory species requiring specific habitat conservation measures;
 - d. Species of which the breeding and/or resting sites require protection and their breeding and for each of these categories to indicate, as far as possible, their sites".

Although the above tasks were addressed to Contracting Parties, the Standing Committee decided, after 1989, to prepare, for the whole of Europe lists for points *a*, *b*, *c* and *d* above.

In December 1996 the Standing Committee adopted Resolution No. 4 identifying endangered natural habitats (point *b*. above) requiring specific conservation measures.

In 1998 at its 18^{th} meeting the Standing Committee adopted Resolution No. 6 (1998) listing the species requiring specific habitat conservation measures (including the migratory species mentioned in c. above).

The identification of species requiring specific habitat conservation measures is a useful step towards the designation of ASCIs because it will guide choices of sites of particular relevance for threatened species.

As for *d*. above (species of which the breeding and/or resting sites require protection), while all of them can be considered as included in *a*. above (*i.e* they require specific habitat conservation measures), the identification of breeding and/or resting sites requiring protection will be clearly associated with the designation of ASCIs, which has not yet started.

The information on ASCIs shall be public and stored in a database, except for the information communicated as confidential. The group of experts will endeavour, under the aegis of the Standing Committee, to publish regularly lists of designated ASCIs and their character and to make that information available in electronic form.

For Contracting Parties of the Convention, which are also member states of the European Community, the procedure will be different. In order to assure harmonisation and compatibility with the Natura 2000 Network, they need only to notify, which areas have been effectively included in the Natura 2000 Network, after all the necessary verification process agreed in the Habitats Directive. This procedure is designed to assure full compatibility and coherence of both networks.

In 2006, a first attempt was made to agree criteria for a simplified biogeographic approach to the evaluation of Emerald sites as described in document T-PVS/Emerald (2007) 03, on the basis of the criteria adopted by the Habitats Committee in 1997 (Hab. 97/2 rev. 4 18/11/97). Meanwhile, the EU accumulated experience within the different Biogeographical seminars and the procedure was gradually amended accordingly. The present paper aims at revising document T-PVS/Emerald (2007) 03, taking into account recent developments in the implementation of the Natura 2000 network and proposing a process to be applied in the preparation of the Pan-European list of ASCIs under the Bern Convention. It is relevant to the implementation of phases II and III of the Emerald process as described in T-PVS/Emerald (2010)5.

In December 2010, the Standing Committee of the Bern Convention adopted the Criteria for assessing the National Lists of proposed ASCIs at biogeographical level and procedure for examining and approving Emerald candidate sites (T-PVS/PA(2010)12). Aside from describing and guiding the biogeographical process in details, this document also provides for the status of "official candidate sites", to be given by the Bern Convention Standing Committee to all proposed sites which have passed successfully the initial quality-check of the country database. Only then, the evaluation of sufficiency of the proposed sites can be initiated at biogeographical level.

Three different stages or "Phases" of implementation can be identified:

Phase I: Participating countries assess their natural resources and identify species and habitats to be protected according to the relevant resolutions of the Bern Convention. They subsequently select potential sites which are suitable for ensuring the long-term survival of the "Emerald" species and habitats, and they send a database containing scientific information on the proposed sites to the Bern Convention's Secretariat.

Phase II: An evaluation of the efficiency of the proposed sites which has to be done on a species by species and habitat by habitat base. Ideally the evaluation would only start if a complete inventory of proposed sites exists for a certain area. Realistically, this would mean that over 80 % of the finally proposed sites would already be available for the evaluation. This exercise is to be conducted in cooperation with the European Environment Agency. Once the scientific value of the proposed sites is assessed, the candidate sites will be submitted to the Standing Committee and will eventually be approved so to formally integrate the Emerald Network. For EU member states an approved Natura 2000 Network of sites will automatically fulfil the parties' obligations towards the Bern Convention and the Emerald Network.

Phase III: National designation of the adopted ASCI's and implementation of management, reporting and monitoring measures, under the responsibility of national authorities.

Following the principles described in Annex III of the Habitats Directive for setting up Natura 2000 sites under that Directive, two distinct stages in the setting up of the Emerald network can be identified:

- 1) An evaluation of the sufficiency of proposed ASCIs species by species and habitat by habitat (equivalent to Annex III, stage 1 of the Habitats Directive);
- 2) An evaluation of the proposed ASCIs site by site at the bio-geographical level (equivalent to Annex III, stage 2 of the Habitats Directive), followed by approval by the GoEPAEN and subsequently adoption at the Standing Committee of the Bern Convention.

In addition, since 2010, all national databases on proposed Emerald sites are submitted through the Common Data Repository of the European Environment Agency;

4. Relations of the Emerald Network with Natura 2000 and the Pan-European Ecological Network

Link with Natura 2000

The Bern Convention (1979) and the Habitats Directive (1992) have a complete coincidence of objectives. Both are international legal instruments aimed at the conservation of wild flora, fauna and natural habitats. Their main differences come from the territory they apply to (European Union member States for the Directive and the whole of Europe and part of Africa for the Convention) and to the fact that the Directive is more explicit on the obligations concerning conservation of natural habitats.

In any case the Directive is a piece of legislation designed to implement the Bern Convention in the European Union and, as such, it is fundamentally coherent with the Convention. As Resolution No. 1 and Recommendations Nos. 14, 15 and 16 were adopted in 1989, and Recommendation No. 25 in 1991 at the time the Directive was being prepared, it is clear that they also influenced the content of the Directive. For instance, the "species requiring specific habitat conservation measures" mentioned in Recommendation No. 14 has its equivalent in Annex II of the Directive ("Animal and plant species of Community interest whose conservation requires the designation of Special Areas of Conservation"). Also the "endangered natural habitats requiring specific habitat conservation measures" of Recommendation No. 14 became Annex I of the Directive ("Natural habitat types of Community interest whose conservation requires the designation of Special Areas of Conservation). Even the term "Areas of Special Conservation Interest" (by the way, inspired by the United Kingdom's Sites of Special Scientific Interest) was taken in the Directive to become finally Special Areas of Conservation. The resemblance is even more striking in French (Zones d'intérêt spécial pour la conservation/Zones spéciales de conservation).

The great interest and merit of the Directive has been to convert into precise law the ideas and recommendations on habitat conservation contained in the Bern Convention, improving its reach and reinforcing its application in the member States of the European Union. It seems clear that the member States of the European Union will satisfy the habitat requirements of the Bern Convention through the designation of sites to the Natura 2000 Network. Thus, the Special Areas of Conservation of the Natura 2000 Network will also become Areas of Special Conservation Interest of the Emerald Network as it is foreseen in Resolution No. 5. This ensures the coherence of the Network for the whole of Europe.

There is an obvious advantage in this approach, which is that the building of the Emerald Network will benefit from the work carried out in the European Union to build Natura 2000, so that remaining work will be concentrated in States which are not members of the European Union. In this way it will be possible to extend to the whole of Europe a homogeneous network of areas, helping to break down in this sector the barriers that history, politics and economic reality have imposed on the European continent. This is in line with the missions, the challenges and the ambitions of the Council of Europe.

Additionally, it may also help some states, candidates to join the European Union, to do part of the preparatory work necessary to comply in advance with the Habitats Directive. It seems evident that if a state designates a coherent network of ASCIs within the Emerald Network, it will be in a more favourable position to designate its own SACs when it joins the Union. Such a possibility has led to close co-operation and coordination of the Council of Europe, serving the Bern Convention, and the European Commission, responsible for the Directive, in terms of technical and financial matters derived from the building of both networks.

In a sense the Emerald Network will take farther than the borders of the European Union the philosophy of the Natura 2000 Network and will materialise in the whole continent the fundamentally coincident objectives of both the Bern Convention and the Habitats Directive regarding conservation of natural habitats. Its success will be that of nature conservation in Europe.

Link with the Pan-European Ecological Network (PEEN)

The setting up of the Pan-European Ecological Network had been conceived within the activities of the Pan-European Biological and Landscape Diversity Strategy (PEBLDS). The Pan-European Strategy was endorsed in October 1995 by the Ministers of Environment meeting in Sofia at the 3rd Ministerial Conference "Environment for Europe".

The PEEN will contain the following key elements:

- Core areas identified in accordance with the application of relevant international instruments (Bern Convention, European Union Habitats and Birds Directives, Ramsar Convention, Bonn Convention, Helsinki Convention, World Heritage Covenntion, the Fourth Protocol of the Barcelona Convention, etc.);
- Ecological corridors restoring the connectivity between differents parts of habitats or connecting core areas :
- Buffer zones mitigating the environmental impacts of activities located outside core areas and corridors;
- Restoration zones where they are needed.

The Natura 2000 and Emerald Networks will constitute the two main components of the Pan-European Ecological Network owing to their political importance, their geographique extent and their biological and landscape diversity.

5. Progress in setting up the Emerald Network

With the adoption in December 1998 of Resolution No. 5 (1998) "Rules for the Emerald network", Resolution No. 6 (1998) listing the species requiring specific habitat conservation measures and the development of the bilingual version of the Emerald software, preparatory work for the launching of the Emerald network was successfully concluded.

Pilot projects programme

In the beginning of 1999, in order to assist the initial implementation phase of the Emerald Network, the Council of Europe proposed to a number of countries of Central and Eastern Europe to start the pilot projects in their respective countries. The overall objective of the Emerald network pilot project is to develop a pilot database, containing a fair proportion of the Areas of Special Conservation Interest and submit a proposal for the sites designation to the Standing Committee of the Bern Convention.

In order to achieve this objective, the countries have to form project teams, carry out the training of the teams (organise the workshop) and proceed with the scientific work (data collection on species and habitats concerned; field survey for a selected pilot area; mapping of distribution data on species and habitats) and technical tasks of installing the software, introduction of data on the sites into the database; preparing Standard Data sheets on the designated sites and transmitting this information in the electronic form to the Secretariat with the project report.

The tasks, which are to be carried out in the framework of the Emerald network pilot project, are described in detail in the document T-PVS/Emerald (2002) 16 "Building up the Emerald Network: a guide for Emerald Network country team leaders", which is intended as a user-friendly guide for the countries, that are implementing Emerald pilot projects.

For Bern Convention Contracting Parties which are European Union Member States, the Emerald Network sites consist of the Natura 2000 sites. Before joining the European Union, the twelve following countries have implemented Emerald pilot projects as preparatory work to setting up the Natura 2000 network: Bulgaria, Czech Republic, Cyprus, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovenia and Slovakia. The other countries engaged in the constitution of the Emerald Network are: in Western Europe, Iceland, Norway, Switzerland, in Central and Eastern Europe, Belarus, Moldova, the Russian Federation and the Ukraine; in South-Eastern and and East Europe, Albania, Bosnia-Herzegovina, Croatia, Montenegro, "the former Yugoslav Republic of Macedonia", Serbia, Turkey; and in the South Caucasus, Armenia, Azerbaijan and Georgia. Today, Emerald training workshops have been organised in each of these countries.

In Africa, three Contracting Parties of the Bern Convention have implemented pilot projects: Burkina Faso, Senegal and Morocco. The Emerald Network could also be launched in Tunisia, at the request of the national authorities.

Regional development programmes of the Emerald Network

An Emerald Network development programme was implemented in 2005/2008, in South-Eastern Europe, as a continuation of the initial pilot projects launched by the Council of Europe. This programme, funded through CARDS grants and thus called "the CARDS/Emerald programme" targetted the following countries: Albania, Bosnia-Herzegovina, Croatia, Montenegro, "The Former Yugoslav Republic of Macedonia" and Serbia. Its overall objective was to identify 100 % of the potential Emerald sites in these countries. The programme benefitted from a financial contribution of the European Environmental Agency and represented an important tool contributing to preparing the countries concerned for the future work on Natura 2000 and for advance compliance with the Habitats and Birds Directives.

A Joint Programme with the European Union has been launched in 2009, for a period of three years, in order to substantially develop the Emerald Network in the seven following countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine and the European part of the Russian Federation. The objective of this Joint Programme is to identify at the end of 2011 all the potential Emerald sites in the three countries of South-Caucasus and in Moldova; the objective set for Belarus and the Russian Federation amounts to 50 % of the potential Emerald sites while in Ukraine, 80 % of the potential Emerald sites are expected to be identified.

Articles 1, 2, 3, 4, 6.b and 9 of the Convention

"(...)

Chapter I – General provisions

Article 1

- 1 The aims of this Convention are to conserve wild flora and fauna and their natural habitats, especially those species and habitats whose conservation requires the co-operation of several States, and to promote such co-operation.
- 2 Particular emphasis is given to endangered and vulnerable species, including endangered and vulnerable migratory species.

Article 2

The Contracting Parties shall take requisite measures to maintain the population of wild flora and fauna at, or adapt it to, a level which corresponds in particular to ecological, scientific and cultural requirements, while taking account of economic and recreational requirements and the needs of sub-species, varieties or forms at risk locally.

Article 3

- 1 Each Contracting Party shall take steps to promote national policies for the conservation of wild flora, wild fauna and natural habitats, with particular attention to endangered and vulnerable species, especially endemic ones, and endangered habitats, in accordance with the provisions of this Convention.
- 2 Each Contracting Party undertakes, in its planning and development policies and in its measures against pollution, to have regard to the conservation of wild flora and fauna.
- 3 Each Contracting Party shall promote education and disseminate general information on the need to conserve species of wild flora and fauna and their habitats.

Chapter II - Protection of habitats

Article 4

- 1 Each Contracting Party shall take appropriate and necessary legislative and administrative measures to ensure the conservation of the habitats of the wild flora and fauna species, especially those specified in the Appendices I and II, and the conservation of endangered natural habitats.
- 2 The Contracting Parties in their planning and development policies shall have regard to the conservation requirements of the areas protected under the preceding paragraph, so as to avoid or minimise as far as possible any deterioration of such areas.
- 3 The Contracting Parties undertake to give special attention to the protection of areas that are of importance for the migratory species specified in Appendices II and III and which are appropriately situated in relation to migration routes, as wintering, staging, feeding, breeding or moulting areas.
- 4 The Contracting Parties undertake to co-ordinate as appropriate their efforts for the protection of the natural habitats referred to in this article when these are situated in frontier areas.

Chapter III - Protection of species

Article 6

Each Contracting Party shall take appropriate and necessary legislative and administrative measures to ensure the special protection of the wild fauna species specified in Appendix II. The following will in particular be prohibited for these species:

b the deliberate damage to or destruction of breeding or resting sites;

Article 9

1 Each Contracting Party may make exceptions from the provisions of Articles 4, 5, 6, 7 and from the prohibition of the use of the means mentioned in Article 8 provided that there is no other satisfactory solution and that the exception will not be detrimental to the survival of the population concerned:

- for the protection of flora and fauna;
- to prevent serious damage to crops, livestock, forests, fisheries, water and other forms of property;
- in the interests of public health and safety, air safety or other overriding public interests;
- for the purposes of research and education, of repopulation, of reintroduction and for the necessary breeding;
- to permit, under strictly supervised conditions, on a selective basis and to a limited extent, the taking, keeping or other
 judicious exploitation of certain wild animals and plants in small numbers.
- The Contracting Parties shall report every two years to the Standing Committee on the exceptions made under the preceding paragraph. These reports must specify:
- the populations which are or have been subject to the exceptions and, when practical, the number of specimens involved;
- the means authorised for the killing or capture;
- the conditions of risk and the circumstances of time and place under which such exceptions were granted;
- the authority empowered to declare that these conditions have been fulfilled, and to take decisions in respect of the means that may be used, their limits and the persons instructed to carry them out;
- the controls involved."

(...)"

Resolution No. 1 (1989) of the Standing Committee on the provisions relating to the conservation of habitats

(adopted by the Standing Committee of 9 June 1989 at its 8th meeting)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention.

Having regard to the obligations laid down by the convention, particularly in Articles 1, 2, 3, 4, 6.b and 9;

Conscious of the fact that most of these obligations bind Contracting Parties as to the results to be attained, while leaving them the choice of the means to be used for that purpose;

Recognising, however, that the absence of a common interpretation of certain provisions of the convention, and certain terms contained therein, may lead to considerable differences in the legal interpretation of the convention by individual Contracting Parties and may undermine the effectiveness of the convention;

Desirous to promote agreement, as much as possible, among Contracting Parties as to what is required to be done in order to implement the convention;

Convinced that a common interpretation of certain of the provisions and terms of the convention, particularly in Articles 4, 6.b and 9, will facilitate the achievement of the aims of the convention in a harmonised way by all Contracting Parties,

Resolves that, for the purpose of improving the effectiveness of the convention, the terms listed hereunder are to be interpreted as follows:

- 1. For the purpose of the convention:
- a. "habitat" of a species (or population of a species) means the abiotic and biotic factors of the environment, whether natural or modified, which are essential to the life and reproduction of members of that species (or population of that species) and which occur within the natural geographical range of the species (or population of that species);
- b. "natural habitat" means a biotope, that is a distinctive type of terrestrial or aquatic area distinguished by geographic, abiotic or biotic features, whether entirely natural or modified as a result of human activities;
- 2. For the purpose of Article 4:
- a. "necessary measures" means in particular those measures which are required:
 - . to ensure the conservation of the habitats of those species which have been identified by the Standing Committee, on the basis of scientific evidence, as requiring specific habitat conservation measures and, most particularly, of those part of their geographical range which are essential for the conservation of those species (hereinafter referred to as "critical sites");
 - ii. to ensure the conservation of those natural habitats which have been identified by the Standing Committee, on the basis of scientific evidence, as being endangered natural habitats and requiring specific conservation measures;
- b. "appropriate measures" means in particular those measures, pursuant to paragraph a above, which are able to ensure the conservation of the habitat of particular species or of particular natural habitats;
- c. "conservation" means the maintenance and, where appropriate, the restoration or improvement of the abiotic and biotic features which form the habitat of a species or a natural habitat, as defined in paragraph I above, and includes, where appropriate, the control of activities which may indirectly result in the deterioration of such habitats, including areas of importance for the migratory species specified in Appendices II and III, even where such areas are outside the jurisdiction of the Party in question;
- d. "areas of importance for the migratory species specified in Appendices II and III" means the critical sites, wherever situated, of those migratory species which have been identified by the Standing Committee, on the basis of scientific evidence, as requiring specific habitat conservation measures;

- e. the conditions attached by Article 9 to the making of exceptions from the provisions of Article 4, as well as the obligation laid down in that article to report such exceptions to the Standing Committee, shall apply to:
 - i. the critical sites of those species which have been identified by the Standing Committee, pursuant to paragraph *a.*i above:
 - ii. natural habitats which have been identified by the Standing Committee, pursuant to paragraph a.ii above;
 - iii. areas of importance for migratory species which have been identified by the Standing Committee, pursuant to paragraph d above;
- 3. For the purpose of Article 6.*b*:
- a. "breeding and resting sites" means, in respect of each species for which the Standing Committee has identified that breeding and/or resting sites require protection, those breeding and/or resting site types in respect of which the Standing Committee has considered that such measures are required;
- b. "deliberate damage to or destruction of breeding or resting sites" means, subject to relevant provisions of the law of each Contracting Party, any act committed with the intention of destroying or causing harm to breeding or resting sites as defined in paragraph a above, and any act committed without the intention to cause damage or destruction but in the knowledge that such would probably by the consequences of the act;
- c. the conditions attached by Article 9 to the making of exceptions from the provisions of Article 6.b, as well as the obligation, laid down in that article, to report these exceptions to the Standing Committee, only apply to those breeding and resting site types in respect of which the Standing Committee has considered that they require protection pursuant to paragraph a above.

Recommendation No. 14 (1989) of the Standing Committee on species habitat conservation and on the conservation of endangered natural habitats (adopted by the Standing Committee on 9 June 1989)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Considering Articles 3 and 4 of the convention;

Having regard to Resolution No. 1 (1989) on the provisions relating to the conservation of habitats, and to the decision it has taken to act by virtue of paragraph 2, sub-paragraphs a and d, and paragraph 3, sub-paragraph a of that resolution,

Recommends that Contracting Parties:

- 1. identify in the areas within their jurisdiction:
- a. species requiring specific habitat conservation measures;
- b. endangered natural habitats requiring specific conservation measures;
- c. migratory species requiring specific habitat conservation measures;
- d. species of which the breeding and/or resting sites require protection and their breeding and/or resting site types requiring protection;

and for each of these categories to indicate, as far as possible, their sites;

- 2. identify, furthermore, endangered species on their territory requiring recovery plans, and develop and implement such plans;
- 3. communicate to the Standing Committee the results of their work in the implementation of the recommendations above;
- 4. ensure that appropriate and necessary measures of conservation are taken for the species, habitats and sites identified according to paragraphs 1 and 2 above.

Recommendation No. 15 (1989) of the Standing Committee on the conservation of endangered natural habitat types

(adopted by the Standing Committee on 9 June 1989)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Having regard to the provisions of Articles 4 and 9, paragraph 1, of the convention and to Resolution No. 1 (1989) on the provisions relating to the conservation of habitats;

Conscious of the need not to endanger the survival of habitat types,

Recommends that Contracting Parties make exceptions to Article 4, by virtue of Article 9, paragraph 1, with respect to endangered natural habitat types as identified by the Standing Committee in Resolution No. 1 (1989) only in exceptional circumstances and provided that the exceptions will not be detrimental to the survival of the habitat type concerned.

Recommendation No. 16 (1989) of the Standing Committee on areas of special conservation interest

(adopted by the Standing Committee on 9 June 1989)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under Article 14 of the convention,

Having regard to Article 4 of the convention and to Resolution No. 1 (1989) on the provisions relating to the conservation of habitats:

Desirous of establishing common criteria for the identification of areas to be conserved;

Desirous also of ensuring that the conservation and management of such areas have regard to certain minimum requirements,

Recommends that Contracting Parties:

- 1. take steps to designate areas of special conservation interest to ensure that necessary and appropriate conservation measures are taken for each area situated within their territory or under their responsibility where that area fits one or several of the following conditions:
- a. it contributes substantially to the survival of threatened species, endemic species, or any species listed in Appendices I and II of the convention;
- b. it supports significant numbers of species in an area of high species diversity or supports important populations of one or more species;
- c. it contains an important and/or representative sample of endangered habitat types;
- d. it contains an outstanding example of a particular habitat type or a mosaic of different habitat types;
- e. it represents an important area for one or more migratory species;
- f. it otherwise contributes substantially to the achievement of the objectives of the convention;
- 2. review regularly or continually in a systematic fashion their performance in the implementation of paragraph 1 above;
- 3. take such steps, either by legislation or otherwise, to ensure wherever possible that:
- a. areas referred to in paragraph 1 above are the subject of an appropriate regime, designed to achieve the conservation of the factors set out in that paragraph;
- b. the agencies responsible for the designation and/or management and/or conservation of such areas or any one of them have available to it sufficient manpower, training, equipment and resources (including financial resources) to enable them properly to manage, conserve and survey the areas;
- c. appropriate ecological and other research is conducted, in a properly co-ordinated fashion, with a view to furthering the understanding of the critical elements in the management of such areas and to monitoring the status of the factors giving rise to their designation and conservation;
- d. activities taking place adjacent to such areas or within their vicinity do not adversely affect the factors giving rise to the designation and conservation of those sites;
- 4. take steps, as appropriate, in respect of areas referred to in paragraph 1 above, to:
- a. draw up and implement management plants which will identify both short- and long-term objectives (such management plans can relate to individual areas or to a collection of areas such as heathlands);
- b. regularly review the terms of the management plans in the light of changing conditions or of increased scientific knowledge:
- c. clearly mark the boundaries of such areas on maps and, as far as possible, on the ground;
- d. advise the competent authorities and landowners of the extent of the areas and their characteristics;
- e. provide for the monitoring of such areas and especially of the factors for which their conservation is important;
- 5. determine those areas which remain inadequately provided for under existing mechanisms and improve the conservation status of such areas, using whatever mechanisms are appropriate in order to meet the requirements of the convention.

Recommendation No. 25 (1991) of the Standing Committee on the conservation of natural areas outside protected areas proper

(adopted by the Standing Committee on 6 December 1991)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under Article 14 of the convention,

Having regard to Articles 1, 2, 3 and 4 of the convention and to its Resolution No. 1 (1989);

Conscious that most of the obligations under Articles 1, 2, 3 and 4 of the convention are binding upon the Contracting Parties as to the results to be attained while allowing them a choice of the means to be used for that purpose;

Conscious that the establishment of protected areas of the A and B categories defined in Resolution 73 (30) of the Committee of Ministers of the Council of Europe of 26 October 1973 may prove to be insufficient to comply with the obligations of the convention;

Recognising that measures to conserve natural habitats outside protected areas thus defined are necessary for the protection of some species;

Recognising, however, that certain forms of action have proved particularly effective in the countries where they have been adopted and that the experience thus acquired should be brought to the attention of all Contracting Parties;

Recognising that flora and fauna conservation is possible only in the context of a regional planning policy conserving their environments and habitats,

Recommends that Contracting Parties:

- 1. examine the possibility, for the purpose of the convention, of taking conservation measures such as those mentioned as examples in the appendix to this recommendation to improve conservation outside the protected areas of categories A and B of the above-mentioned Resolution (73) 30 of the Committee of Ministers;
- 2. communicate to the Secretariat, for the information of the other Contracting Parties, any other relevant measures they have already taken or intend to take as well as any available information on the effects of measures they have taken.

Appendix

Examples of conservation measures¹

- I. General measures for promoting ecological management of the environment as a whole
- 1. Submit all projects, plans, programmes and measures with an impact on the natural and semi-natural environment to an examination of environmental compatibility with a view to protecting nature and landscapes and conserving them intact in cases where there is an overriding general interest in doing so.
- 2. Take care to use agricultural land and forests in a sustainable way by making maximum possible use of natural protection capacities and by reducing inputs.
- 3. Encourage the use of environment friendly technologies when carrying out technical operations in natural or semi-natural environment, and replace large-scale single operations by regular maintenance measures which are more evenly distributed in time and space. If it is impossible to avoid affecting natural or semi-natural environments which are worth protecting, ensure that mitigation measures are taken to minimise as much as possible the negative effects of the operations, to restore, or failing this, to replace them by adequate compensation.

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¹ These examples have been taken from document T-PVS (90) 52 on "The conservation of natural habitats outside protected areas proper – a juridical analysis", Cyrille de Klemm, 1990.

II. Areas of special consrvation interest

- 1. Draw up a detailed inventory of areas of special conservation interest as defined in paragraph 1 of the Standing Committee's Recommendation No. 16 (1989) and ensuring the conservation and management of those areas, when it is not possible or appropriate to include them in protected areas of categories A and B, by taking, in particular, the following measures:
- a. including those areas in land-use planning zones which enjoy a high level of protection;
- b. requiring that any development or activity liable to have an adverse ecological impact on those areas be subject to the authorisation, consultation, or agreement of the nature conservation authorities;
- c. requiring that any request for permission submitted in accordance with paragraph b above be accompanied by an environmental impact assessment or equivalent assessment making it possible to determine the precise effects of the proposed development or activity on the ecological characteristics which warranted the inclusion of those areas in the inventory;
- d. advising government agencies against carrying out, authorising or subsidising developments or activities which are shown by the environmental impact assessment or equivalent assessment adversely to affect significantly those ecological characteristics;
- e. granting exceptions to these provisions only under the conditions specified in Article 9 of the convention and in Recommendation No. 15 (1989) of the Standing Committee;
- f. taking the necessary measures to ensure that laws and regulations laying down obligations with regard to drainage, use of phytosanitary products, dredging of watercourses, consolidation of land-holdings or other activities liable to harm the natural environment are not compulsorily applicable to areas appearing in the inventory.
- 2. Facilitate the acquisition and management of areas of special conservation interest by the state or other public bodies in particular by taking the following measures:
- a. Acquisition:
 - i. establishing a right of pre-emption for the state or other public bodies in respect of land included in the said areas;
 - ii. authorising land forming part of those areas to be transferred to the state in lieu of inheritance tax;
 - iii. introducing incentives to encourage gifts and bequests of land included in those areas to the state or to other public bodies, such as tax concessions, the payment of an annuity to donors until their deaths or authorising donors to stay on until their death, as usufructuaries;

b. Management:

- i. when a government agency is not in a position to manage land it owns or is responsible for within an area of special interest, arranging for the land to be managed by another government agency or a private person;
- ii. authorising the conclusion of long-term management contracts between the government agency that owns or is responsible for the land and a public body or private person;
- iii. authorising the nature conservation agency to conclude co-operative agreements with the public body owning or responsible for the land, for the purpose of managing the land concerned.
- 3. Facilitate the acquisition, conservation and management of areas of special conservation interest by private persons, in particular by taking the following measures:
- a. Acquisition:

granting subsidies, loans and tax concessions to private nature conservation organisations for the acquisition of land included in such areas;

- b. Conservation:
 - setting up voluntary reserves approved by a government agency and enjoying as such the same level of protection as reserves set up by government agencies themselves;
 - ii. authorising the imposition by contract of land use restrictions which may be binding upon successors in title;
 - iii. granting tax concessions to owners or occupiers who comply with these restrictions. It should be possible to apply the concessions to property tax and inheritance tax. In the latter case, it should be possible to grant concessions to heirs who undertake to conserve and manage the areas concerned according to a management plan drawn up by the conservation authorities. In the event of failure to observe the conditions in this plan, inheritance tax would immediately become due;
 - iv. providing the state with the necessary legal powers to introduce immediate controls prohibiting all potentially harmful activities in the event of a threat to the integrity of an area of special interest and, where necessary, to expropriate the land in question:

c. Management:

- setting up a system of management agreements, where such a system does not already exist, between the state or another
 public body on the one hand, and the owners of land included in areas of special interest on the other, whereby the latter
 undertake to perform or refrain from certain actions in return for fair remuneration and other possible benefits such as tax
 concessions;
- ii. eliminating legal obstacles liable to hamper the conservation of land within areas of special interest, particularly rules prohibiting the owner from including in a farm lease clauses that limit the tenant farmer's freedom, for example with regard to the removal of banks and hedges or the ploughing up of meadowland.

III. Ecological corridors

Encourage the conservation and, where necessary, the restoration of ecological corridors in particular by taking the following measures:

1. Rights of way of roads, railways and high-voltage lines

Authorising agreements between nature conservation authorities and government or other public bodies owning or responsible for such areas with a view to maintaining natural plant cover and preserving the sites of rare or endangered plant species, prohibiting or limiting the use of phytosanitary products and of fire in those areas, as well as restricting the use of machinery to the strict minimum necessary for safety reasons.

Taking measures to restore or to compensate for the loss of ecological corridors caused by the building of new roads and other constructions that prevent animals from migrating or interchanging. In these cases, the responsible authority has to safeguard such crossing routes, for example, by building special tunnels for otters, badgers, by building so-called cerviducts for deer, by closing roads during the spring migrational period for amphibians, or by any other appropriate measures.

2. Watercourses

Maintaining certain watercourses or parts thereof in their natural state, and where necessary restoring them, by prohibiting the building of dams, any straightening or canalisation work and the extraction of materials from their beds, and by maintaining or restoring vegetation along their banks. Ensuring that dredging operations, when they prove essential, do not harm the integrity of the aquatic ecosystem or of the banks.

On other watercourses, limiting canalisation and straightening work to whatever is absolutely essential, providing fish passes across dams, maintaining a minimum flow in low-water periods as far as possible, limiting extraction of materials from the bed and maintaining vegetation along the banks.

IV. Habitat types

- 1. Ensure the conservation of endangered habitat types such as wetlands, heathlands and dry grasslands by requiring that all projects liable to cause their deterioration or destruction be subject to the permission (or agreement) of the authority responsible for nature conservation.
- 2. Subject permission, once it has been granted, to an obligation, where appropriate, to take suitable compensation measures.
- 3. Set up a system of management agreements, together with financial incentives, to provide for the management of certain habitat types, whether or not they are protected.

V. Landscape features

Encourage the conservation of landscape features such as streams, ponds, small woods, individual trees, hedges and natural grassland, in particular, by taking the following measures:

- 1. drawing up in each municipality an inventory of landscape features which should be preserved;
- 2. taking these features into account in the preparation or revision of land-use plans by including them in zones enjoying a high level of protection;
- 3. setting up a system of management agreements for the preservation and, where appropriate, the management of the landscape features thus protected;
- 4. for each agricultural production unit, establishing, in agreement with the farmer, a conservation plan comprising:
- a. an ecological analysis of the unit;
- b. a map of landscape features and natural areas to be conserved and, where necessary, restored or reconstituted;
- c. practicable and advisable "extensification" methods;
- d. setting aside certain plots of land where appropriate, selected on the basis of an ecological study;
- e. a management agreement specifying the results to be achieved, the means needed to achieve them and the amounts to be paid to the farmer by way of compensation or remuneration for services rendered.

VI. Ecologically sensitive areas

Set up special legal regimes applicable to certain areas requiring specific measures on account of their ecological vulnerability and the various kinds of pressure to which they are exposed, including, in particular, the following measures:

- 1. Coastlines and adjacent marine areas
- a. setting up a legal regime for natural areas in the public maritime domain which takes account of the need to preserve the natural habitats comprising them and which regulates activities liable to affect them adversely;
- b. instituting binding land-use plans for marine areas which are of special ecological interest or require special protective measures on account of their vulnerability;
- c. adopting special planning regulations prohibiting or limiting new development, especially the building of roads, on the coastline;

- d. protecting landscape features and habitats characteristic of coastal ecosystems, such as dunes, beaches, cliffs, wetlands, salt marshes and woodlands, by including them in land-use planning zones enjoying the highest level of protection;
- e. as far as possible, eliminating the difficulties due to the division of powers between different government agencies on either side of the upper limit of the public maritime domain by setting up a co-ordinating mechanism allowing for the management of the coastline and the adjacent marine areas, particularly protected ones, as a single unit.

2. Montains

- a. providing for financial means of encouragement along with management agreements to maintain the rural mountain population, while promoting farming methods respectful of natural habitats and the balance of nature; adjusting aid arrangements for stock-breeding in mountain areas to the carrying capacity of the pasture land;
- b. designating areas where the building of roads, except access tracks to pastures and forests, and the construction of buildings and other structures are prohibited;
- c. including in land-use planning zones enjoying the highest level of protection the landscape features and habitats typical of mountain ecosystems, such as glaciers, névés, moraines, rock faces, scree, high-altitude lakes, torrents, peat bogs and dry grasslands;
- d. regulating off-piste skiing, the spreading of artificial snow, the use of cross-country vehicles and any other activities liable to harm mountain ecosystems.

3. Flood plains

- a. maintaining and, where possible, restoring the natural cycle of flooding in flood-plains;
- b. designating flood-risk areas and subjecting them to special restrictions, particularly with regard to building;
- c. protecting landscape features and habitats that are typical of flood plains, such as alluvial forests, water meadows, oxbow lakes and islands, by including them in land-use planning zones enjoying the highest level of protection;
- d. encouraging the continuation of traditional agricultural and stock breeding methods by means of subsidies and management agreements;
- e. requiring prior authorisation for any drainage or conversion of wetlands in a flood plain;
- f. creating river nature parks, in accordance with paragraph VII.3 below.

4. Forests

- a. maintaining at least 2% of the surface area of publicly-owned indigenous and natural forests in its natural state by letting biological cycles, including the recycling of dead wood, occur freely;
- b. setting up a system of management agreements with the owners of private forests to encourage the conservation of certain forest ecosystems or the continuation of certain forestry practices;
- c. adopting regulations to ensure the protection of forest clearings and edges;
- d requiring that, after an environmental impact assessment has been carried out, any afforestation of semi-natural or natural non-wooded land and any conversion of natural forest into artificial forest be subject to the permission (or agreement) of the authority responsible for nature conservation and/or forest management.

VII. Protected landscapes

- 1. Set up a network of nature parks of the C and D categories defined in Resolution (73) 30 of the Committee of Ministers with a view to conserving European landscapes by managing all their component elements in an integrated way.
- 2. Provide each nature park thus defined with the following means of action:
- a. a specific land-use planning instrument with which the land-use plans of municipalities situated in the park must comply, and which includes the zoning and regulation of human activities according to the conservation needs of each zone;
- b. incentives to encourage the maintenance of traditional activities compatible with the conservation needs of each zone, or necessary to achieve them:
- c. administration specific to each park and empowered to grant the permits required to carry out those activities which are regulated in each zone;
- d. adequate funds and staff for providing information, encouragement and financial or technical assistance to all public bodies and private individuals that own land or carry out activities in the park.
- 3. Pay particular attention to establishing river nature parks covering the whole width of the flood plain, on either side of certain watercourses or parts thereof, where hydraulic schemes, drainage and any activities liable to harm river and alluvial ecosystems are regulated.

Resolution No. 3 (1996) of the Standing Committee concerning the setting up of a Pan-European Ecological Network

(adopted by the Standing Committee on 26 January 1996)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Desirous to pursue the implementation of its Recommendation No. 16 (1989) on areas of special conservation interest;

Desirous also to contribute as a first step to the implementation of the Pan-European Biological and Landscape Diversity Strategy, in particular to Theme 1 of the strategy "Establishing the Pan-European ecological network", as endorsed at the Ministerial Conference "Environment for Europe" (Sofia, Bulgaria, October 1995),

Resolves to:

- 1. set up a network (Emerald Network) which would include the areas of special conservation interest designated following its Recommendation No. 16;
- 2. create a group of experts to carry out the necessary activities related to the building up of the network;
- 3. encourage contracting parties and observer states to designate areas of special conservation interest and to notify them to the Secretariat;
- 4. invite European states which are observer states in the Standing Committee of the Bern Convention to participate in the network and designate areas of special conservation interest.

Resolution No. 4 (1996) of the Standing Committee

listing endangered natural habitat requiring specific conservation measures

(adopted by the Standing Committee on 6 December 1996)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Having regard to its Resolution No. 1 (1989) on the provisions relating to the conservation of habitats,

Having regard to its Recommendation No. 14 (1989) on species habitat conservation and on the conservation of endangered natural habitats,

Acknowledging that for Contracting Parties which are Member States of the European Union the list of natural habitats requiring specific conservation measures corresponds to Annex I of the Council Directive 92/43/EEC,

Resolves to identify the natural habitats listed in Annex I to this resolution as endangered natural habitat types requiring specific conservation measures. (Selected habitats are marked with the sign!)

Resolves to update periodically Annex I to this resolution.

Revised Annex I of Resolution 4 (1996) of the Bern Convention on endangered natural habitat types using the EUNIS habitat classification

(Adopted by the Standing Committee on 9 December 2010)

ENDANGERED NATURAL HABITAT TYPES

	A	Marine habitats
	A1	Littoral rock and other hard substrata
	A1.1	High energy littoral rock
!	A1.11	Mussel and/or barnacle communities
!	A1.14 A1.141	Mediterranean and Black Sea communities of lower mediolittoral rock very exposed to wave action Association with [Lithophyllum byssoides]
	A1.2	Moderate energy littoral rock
!	A1.22	Mussels and fucoids on moderately exposed shores
	A1.4	Features of littoral rock
!	A1.44	Communities of littoral caves and overhangs
	A2	Littoral sediment
!	A2.2	Littoral sand and muddy sand
!	A2.3	Littoral mud
!	A2.4	Littoral mixed sediments
!	A2.5	Coastal saltmarshes and saline reedbeds
		includes the following subtypes separately listed in or split units from the 1998 version:
		A2.521 Atlantic and Baltic brackish saltmarsh communities
		A2.531 Atlantic upper shore communities
		A2.542 Atlantic lower shore communities
		A2.5514 [Salicornia veneta] swards
		A2.5515 Black Sea annual [Salicornia], [Suaeda] and [Salsola] saltmarshes A2.553 Atlantic [Sagina maritima] communities
	A2.6	
	A2.0	Littoral sediments dominated by aquatic angiosperms

!	A2.61 A2.621	Seagrass beds on littoral sediments [Eleocharis] beds
!	A2.7 A2.72	Littoral biogenic reefs Littoral mussel beds on sediment
!	A3	Infralittoral rock and other hard substrata includes the following subtypes separately listed in or split units from the 1998 version: A3.71 Robust faunal cushions and crusts in surge gullies and caves A3.74 Caves and overhangs in infralittoral rock
!	A4	Circalittoral rock and other hard substrata includes the following subtypes separately listed in or split units from the 1998 version: A4.24 Mussel beds on circalittoral rock A4.26 Mediterranean coralligenous communities moderately exposed to hydrodynamic action A4.32 Mediterranean coralligenous communities sheltered from hydrodynamic action Communities of circalittoral caves and overhangs
!	A5	Sublittoral sediment includes the following subtypes separately listed in or split units from the 1998 version: A5.627 Baltic mussel beds in the infralittoral photic zone
	A6	Deep-sea bed
!	A6.9 A6.91 A6.911	Vents, seeps, hypoxic and anoxic habitats of the deep sea Deep-sea reducing habitats Seeps in the deep-sea bed
	В	Coastal habitats
	B1	Coastal dunes and sandy shores
!!!!!!!	B1.3 B1.4 B1.5 B1.6 B1.7 B1.8 B1.9	Shifting coastal dunes Coastal stable dune grassland (grey dunes) Coastal dune heaths Coastal dune scrub Coastal dune woods Moist and wet dune slacks Machair
!	B2 B2.3	Coastal shingle Upper shingle beaches with open vegetation
	С	Inland surface waters
	C1	Surface standing waters
!	C1.1	Permanent oligotrophic lakes, ponds and pools includes the following subtype separately listed in or split unit from the 1998 version: C1.14 Charophyte submerged carpets in oligotrophic waterbodies
! ! ! !	C1.2 C1.22 C1.222 C1.223 C1.224 C1.225 C1.226 C1.24	Permanent mesotrophic lakes, ponds and pools Free-floating vegetation of mesotrophic waterbodies Floating [Hydrocharis morsus-ranae] rafts Floating [Stratiotes aloides] rafts Floating [Utricularia australis] and [Utricularia vulgaris] colonies Floating [Salvinia natans] mats Floating [Aldrovanda vesiculosa] communities Rooted floating vegetation of mesotrophic waterbodies
!!	C1.241 C1.2416 C1.25	Floating broad-leaved carpets [Nelumbo nucifera] beds Charophyte submerged carpets in mesotrophic waterbodies

!!	C1.3 C1.34 C1.341 C1.3411 C1.3413	Permanent eutrophic lakes, ponds and pools Rooted floating vegetation of eutrophic waterbodies Shallow-water floating communities [Ranunculus] communities in shallow water [Hottonia palustris] beds in shallow water
!	C1.4 C1.44	Permanent dystrophic lakes, ponds and pools Charophyte submerged carpets in dystrophic waterbodies
!	C1.5	Permanent inland saline and brackish lakes, ponds and pools
!	C1.6 C1.66 C1.67	Temporary lakes, ponds and pools Temporary inland saline and brackish waters Turlough and lake-bottom meadows
	C2	Surface running waters
!	C2.1 C2.12	Springs, spring brooks and geysers Hard water springs
	C3	Littoral zone of inland surface waterbodies
! ! !	C3.4 C3.41 C3.42 C3.421 C3.422 C3.43 C3.431	Species-poor beds of low-growing water-fringing or amphibious vegetation Euro-Siberian perennial amphibious communities Mediterraneo-Atlantic amphibious communities Short Mediterranean amphibious communities Tall Mediterranean amphibious communities Central Eurasian amphibious communities Ponto-Pannonic riverbank dwarf sedge communities
! ! ! !	C3.5 C3.51 C3.511 C3.512 C3.5132 C3.5133 C3.55	Periodically inundated shores with pioneer and ephemeral vegetation Euro-Siberian dwarf annual amphibious swards Freshwater dwarf [Eleocharis] communities Dune-slack [Centaurium] swards Swards of small [Cyperus] species Wet ground dwarf herb communities Sparsely vegetated river gravel banks
!	C3.6 C3.62	Unvegetated or sparsely vegetated shores with soft or mobile sediments Unvegetated river gravel banks
_	D	Mires, bogs and fens
	D1	Raised and blanket bogs
!	D1.2	Blanket bogs
	D2	Valley mires, poor fens and transition mires
!!	D2.2 D2.22 D2.226 D2.3	Poor fens and soft-water spring mires [Carex nigra], [Carex canescens], [Carex echinata] fens Peri-Danubian black-white-star sedge fens Transition mires and quaking bogs includes the following subtype separately listed in or split unit from the 1998 version: D2.3H Wet, open, acid peat and sand, with [Rhynchospora alba] and [Drosera]
! ! !	D3 D3.1 D3.2 D3.3	Aapa, palsa and polygon mires Palsa mires Aapa mires Polygon mires

	D4	Base-rich fens and calcareous spring mires
!	D4.1 D4.2	Rich fens, including eutrophic tall-herb fens and calcareous flushes and soaks Basic mountain flushes and streamsides, with a rich arctic-montane flora
	D5	Sedge and reedbeds, normally without free-standing water
!	D5.2	Beds of large sedges normally without free-standing water
	D6	Inland saline and brackish marshes and reedbeds
!	D6.1	Inland saltmarshes includes the following subtypes separately listed in or split units from the 1998 version: D6.15 Interior Iberian [Microcnemum] and [Salicornia] swards D6.16 Interior central European and Anatolian [Salicornia], [Microcnemum], [Suaeda] and [Salsola] swards
	Е	Grasslands and lands dominated by forbs, mosses or lichens
	E1	Dry grasslands
!	E1.1 E1.11 E1.112	Inland sand and rock with open vegetation Euro-Siberian rock debris swards [Sempervivum] or [Jovibarba] communities on rock debris
!	E1.2	Perennial calcareous grassland and basic steppes
!	E1.3	Mediterranean xeric grassland
!	E1.7 E1.71	Closed non-Mediterranean dry acid and neutral grassland [Nardus stricta] swards
!	E1.8 E1.83	Closed Mediterranean dry acid and neutral grassland Mediterraneo-montane [Nardus stricta] swards
!	E1.B	Heavy-metal grassland
	E2	Mesic grasslands
!	E2.2 E2.25	Low and medium altitude hay meadows Continental meadows
	E3	Seasonally wet and wet grasslands
!	E3.1	Mediterranean tall humid grassland includes the following subtypes separately listed in or split units from the 1998 version: E3.111 [Serapias] grassland
!	E3.4 E3.5	Moist or wet eutrophic and mesotrophic grassland Moist or wet oligotrophic grassland
	E5	Woodland fringes and clearings and tall forb stands
! ! !	E5.4 E5.41 E5.411 E5.4111 E5.4112 E5.4113 E5.414 E5.415	Moist or wet tall-herb and fern fringes and meadows Screens or veils of perennial tall herbs lining watercourses Watercourse veils (other than of [Filipendula]) [Angelica archangelica] fluvial communities [Angelica heterocarpa] fluvial communities [Althaea officinalis] screens Continental river bank tall-herb communities dominated by [Filipendula] Eastern nemoral riverbanks with tall herb communities
	E5.42	Tall-herb communities of humid meadows

!!	E5.423 E5.424	Continental tall-herb communities of humid meadows Eastern nemoral Tall-herb communities of humid meadows
	E6	Inland salt steppes
!!	E6.1 E6.2	Mediterranean inland salt steppes Continental inland salt steppes includes the following subtype separately listed in or split unit from the 1998 version: E6.23 Central Eurasian solonchak grassland with [Crypsis]
	E7	Sparsely wooded grasslands
!	E7.3	Dehesa
	F	Heathland, scrub and tundra
	F2	Arctic, alpine and subalpine scrub
!!!	F2.2 F2.22 F2.224 F2.225 F2.26	Evergreen alpine and subalpine heath and scrub Alpide acidocline [Rhododendron] heaths Carpathian [Rhododendron kotschyi] heaths Balkan [Rhododendron kotschyi] heaths [Bruckenthalia] heaths
	F3	Temperate and mediterranean-montane scrub
!	F3.2 F3.24 F3.241	Submediterranean deciduous thickets and brushes Subcontinental and continental deciduous thickets Central European subcontinental thickets
! ! !	F4 F4.1 F4.2 F4.3	Temperate shrub heathland Wet heaths Dry heaths Macaronesian heaths
	F5	Maquis, arborescent matorral and thermo-Mediterranean brushes
! ! ! !	F5.5 F5.52 F5.54 F5.55 F5.56 F5.5B	Thermo-Mediterranean scrub [Euphorbia dendroides] formations [Chamaerops humilis] brush Mediterranean pre-desert scrub Thermo-Mediterranean broom fields (retamares) Cabo de Sao Vicente brushes
	F6	Garrigue
!!	F6.7 F6.8	Mediterranean gypsum scrubs Xero-halophile scrubs
!	F7	Spiny Mediterranean heaths (phrygana, hedgehog-heaths and related coastal cliff vegetation)
	F9	Riverine and fen scrubs
!!	F9.1 F9.3	Riverine scrub Southern riparian galleries and thickets (Excluding F9.35: Riperian stands of invasive shrubs)
	G	Woodland, forest and other wooded land
	G1	Broadleaved deciduous woodland
!	G1.1 G1.11	Riparian and gallery woodland, with dominant [Alnus], [Betula], [Populus] or [Salix] Riverine [Salix] woodland

! !	G1.12 G1.13	Boreo-alpine riparian galleries Southern [Alnus] and [Betula] galleries
! ! !	G1.2 G1.21 G1.22 G1.221 G1.223 G1.224	Mixed riparian floodplain and gallery woodland Riverine [Fraxinus] - [Alnus] woodland, wet at high but not at low water Mixed [Quercus] - [Ulmus] - [Fraxinus] woodland of great rivers Great medio-European fluvial forests Southeast European [Fraxinus] - [Quercus] - [Alnus] forests Po [Quercus] - [Fraxinus] - [Alnus] forests
! ! !	G1.3 G1.36 G1.37 G1.38 G1.39	Mediterranean riparian woodland Ponto-Sarmatic mixed [Populus] riverine forests Irano-Anatolian mixed riverine forests [Platanus orientalis] woods [Liquidambar orientalis] woods
! ! !	G1.4 G1.41 G1.411 G1.4115 G1.414 G1.44	Broadleaved swamp woodland not on acid peat [Alnus] swamp woods not on acid peat Meso-eutrophic swamp alder woods Eastern Carpathian [Alnus glutinosa] swamp woods Steppe swamp [Alnus glutinosa] woods Wet-ground woodland of the Black and Caspian Seas
!	G1.5 G1.51	Broadleaved swamp woodland on acid peat Sphagnum [Betula] woods
!	G1.6	[Fagus] woodland
!	G1.7	Thermophilous deciduous woodland (excluding G1.7D Castanea sativa woodland) includes the following subtypes separately listed in or split units from the 1998 version: G1.7B [Quercus pyrenaica] woodland G1.7C Mixed thermophilous woodland
!	G1.8	Acidophilous [Quercus]-dominated woodland
!!!	G1.A G1.A1 G1.A4 G1.A7	Meso- and eutrophic [Quercus], [Carpinus], [Fraxinus], [Acer], [Tilia], [Ulmus] and related woodland [Quercus] - [Fraxinus] - [Carpinus betulus] woodland on eutrophic and mesotrophic soils Ravine and slope woodland Mixed deciduous woodland of the Black and Caspian Seas
!	G2	Broadleaved evergreen woodland (excluding G2.8 Highly artificial broadleaved evergreen forestry plantations and G2.9 Evergreen orchards and groves)
	G3	Coniferous woodland
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	G3.1 G3.15 G3.16 G3.17 G3.19 G3.1B G3.1C G3.1D G3.1E G3.1E1 G3.1E3 G3.1E4 G3.1E3 G3.1E4 G3.1E5 G3.1G	[Abies] and [Picea] woodland Southern Apennine [Abies alba] forests Moesian [Abies alba] forests Balkano-Pontic [Abies] forests [Abies pinsapo] forests Alpine and Carpathian subalpine [Picea] forests Inner range montane [Picea] forests Hercynian subalpine [Picea] forests Southern European [Picea abies] forests Southeastern Moesian [Picea abies] forests Montenegrine [Picea abies] forests Pelagonide [Picea abies] forests Balkan Range [Picea abies] forests [Picea omorika] forests [Picea orientalis] forests
	G3.2	Alpine [Larix] - [Pinus cembra] woodland

	C2 21	Factory Alpina cilianous II arive and IDinus combrol forests
!	G3.21	Eastern Alpine siliceous [Larix] and [Pinus cembra] forests
!	G3.22	Eastern Alpine calcicolous [Larix] and [Pinus cembra] forests
!	G3.25	Carpathian [Larix] and [Pinus cembra] forests
!	G3.26	[Larix polonica] forests
	G3.3	[Pinus uncinata] woodland
!	G3.31	[Pinus uncinata] forests with [Rhododendron ferrugineum]
!	G3.32	Xerocline [Pinus uncinata] forests
	G3.4	[Pinus sylvestris] woodland south of the taiga
!	G3.41	Caledonian forest
-	G3.42	Middle European [Pinus sylvestris] forests
	G3.423	Western Eurasian steppe pine forests
!	G3.4232	Sarmatic steppe [Pinus sylvestris] forests
!	G3.4233	Carpathian steppe [Pinus sylvestris] woods
!	G3.4234	Pannonic steppe [Pinus sylvestris] woods
	G3.44	Spring heath [Pinus sylvestris] forests
!	G3.442	Carpathian relict calcicolous [Pinus sylvestris] forests
!	G3.4C	Southeastern European [Pinus sylvestris] forests
!	G3.4E	Ponto-Caucasian [Pinus sylvestris] forests
	G3.5	[Pinus nigra] woodland
!	G3.51	Alpino-Apennine [Pinus nigra] forests
!	G3.52	Western Balkanic [Pinus nigra] forests
!	G3.53	[Pinus salzmannii] forests
!	G3.54	Corsican [Pinus laricio] forests
!	G3.55	Calabrian [Pinus laricio] forests
!	G3.56	[Pinus pallasiana] and [Pinus banatica] forests
!	G3.6	Subalpine mediterranean [Pinus] woodland
	G3.7	Lowland to montane mediterranean [Pinus] woodland (excluding [Pinus nigra])
	G3.71	Maritime [Pinus pinaster ssp. atlantica] forests
!	G3.711	Charente [Pinus pinaster ssp. atlantica] - [Quercus ilex] forests
!	G3.712	Aquitanian [Pinus pinaster ssp. atlantica] - [Quercus suber] forests
!	G3.714	Iberian [Pinus pinaster ssp. atlantica] forests
!	G3.72	[Pinus pinaster ssp. pinaster] ([Pinus mesogeensis]) forests
!	G3.73	[Pinus pinea] forests
	G3.74	[Pinus halepensis] forests
!	G3.741	Iberian [Pinus halepensis] forests
!	G3.742	Balearic [Pinus halepensis] forests
!	G3.743	Provenço-Ligurian [Pinus halepensis] forests
!	G3.744	Corsican [Pinus halepensis] woods
!	G3.745	Sardinian [Pinus halepensis] woods
!	G3.746	Sicilian [Pinus halepensis] woods
	G3.747	Italic [Pinus halepensis] forests
!	G3.7471	Gargano [Pinus halepensis] forests
!	G3.7472	Metapontine [Pinus halepensis] forests
!	G3.7473	Umbrian [Pinus halepensis] forests
!	G3.748	Hellenic [Pinus halepensis] forests
!	G3.749	Illyrian [Pinus halepensis] forests
!	G3.74A	East Mediterranean [Pinus halepensis] forests
!	G3.75	[Pinus brutia] forests
•	325	[
!	G3.8	Canary Island [Pinus canariensis] woodland
٠	G3.0	Canaly Island [1 mas candifensis] woodiand
!	G3.9	Coniferous woodland dominated by [Cupressaceae] or [Taxaceae]
:	U3.7	
		includes the following subtypes separately listed in or split unit from the 1998 version:
		G3.9C [Cedrus] woodland
!	G3.D	Boreal bog conifer woodland

!	G3.E	Nemoral bog conifer woodland
	Н	Inland unvegetated or sparsely vegetated habitats
!	H1	Terrestrial underground caves, cave systems, passages and waterbodies
!	H2 H2.6 H2.61 H2.613	Screes Calcareous and ultra-basic screes of warm exposures Peri-Alpine thermophilous screes Paris Basin screes
	X	Habitat complexes
<u> </u>	X X01	Habitat complexes Estuaries
! !		
!!!	X01	Estuaries
!!!!	X01 X02	Estuaries Saline coastal lagoons
!!!!!!	X01 X02 X03	Estuaries Saline coastal lagoons Brackish coastal lagoons
!!!!!!	X01 X02 X03 X04	Estuaries Saline coastal lagoons Brackish coastal lagoons Raised bog complexes

Resolution No. 5 (1998) of the Standing Committee concerning the rules for the Network of areas of special conservation interest (Emerald Network)

(adopted by the Standing Committee on 4 December 1998)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Having regard to its Resolution No. 1 (1989) on the provisions relating to the conservation of habitats;

Having regard to its Recommendation No. 14 (1989) on species habitat conservation and on the conservation of endangered natural habitats;

Having regard to its Recommendation No. 16 (1989) on Areas of Special Conservation Interest;

Having regard to its Resolution No. 3 (1996) on the setting-up of a pan-European Ecological Network;

Having regard to its Resolution No. 4 (1996) listing endangered natural habitats requiring specific habitat conservation measures;

Having regard to its Resolution No. 6 (1998) listing the species requiring specific habitat conservation measures;

Considering that for Contracting Parties which are Member States of the European Union Emerald Network sites are those of the Natura 2000 Network. Thus the procedures established by European Council Directives 79/409/EEC and 92/43/EEC will be the only rules to apply;

Noting that, following points 3 and 4 of Resolution No 3 (1996), the use of the term "governments" in this resolution means the governments of the States Contracting Parties to the Convention, of other Council of Europe States and of other States which are observer States in the Standing Committee of the Convention,

Resolves to adopt hereby the Rules for the Emerald Network of Areas of Special Conservation Interest:

Article 1

Any area, whether land or sea, where that area fits one or several of the conditions established in Recommendation No. 16 (1989), point 1, may form part of the Emerald Network.

Article 2

- 2.1. Areas of Special Conservation Interest (ASCIs) to be included in the Emerald Network shall be designated by the governments.
- 2.2. The Standing Committee may advise the government concerned on the advisability of designating one or more ASCIs that are of a particular interest to the Emerald Network.

Article 3

- 3.1. Any government designating an ASCI shall deposit a standard Data Form with the Secretariat. A model for this Standard Data Form, derived from and compatible with the Natura 2000 Standard Data Form, is found as appendix to this resolution. Governments are encouraged to provide the information for the Standard Data Form on electronic support.
- 3.2. Where the designations conform with the provisions of Article 1 of this resolution, the Secretariat shall notify the government of the fact and shall register them.
- 3.3. If not, the Standing Committee shall advise the government concerned to withdraw the designation. If the overnment nevertheless maintains the designation, the Standing Committee may decide not to accept it.
- 3.4. The information on ASCIs shall be public and stored in a database, except for information communicated as confidential. Governments are requested not to send any confidential information in electronic form, but to do it separately, mentioning its confidentiality. Confidential information shall not be included in the database and shall not become public.

Article 4

- 4.1. The governments shall undertake surveillance of the conservation status of species and natural habitats in designated ASCIs.
- 4.2. The governments shall inform the Secretariat of any important changes likely to affect negatively in a substantial way the ecological character of the designated ASCIs or the conditions having justified their designation.
- 4.3. Where any such changes come to light, the Standing Committee may advise the government concerned on steps to be taken to ensure conformity with the provisions of Recommendation No. 16 (1989).
- 4.4. Exceptions to the provisions of Articles 4, 5, 6 and 7 of the Convention in designated ASCIs shall be regulated by Article 9 of the Convention.

Article 5

- 5.1. The Group of Experts on the Setting-up of the Emerald Network shall follow the progress of the Emerald Network under the aegis of the Standing Committee. It will endeavour, under the aegis of the Standing Committee, to publish regularly lists of designated ASCIs and their character and to make that information available in electronic form.
- 5.2. The Standing Committee shall periodically review the contribution of the Emerald Network towards the achievement of the objectives of the Convention. In this context a designated ASCI may be considered for declassification where this is warranted by natural developments noted as a result of the surveillance provided for in Article 4.1.

Article 6

The Standing Committee shall encourage governments to implement Recommendation No. 16 (1989) on designated ASCIs and shall use its best endeavours to solve any difficulty that may arise in the implementation or interpretation of this resolution.

Appendix to Resolution No. 5

Standard Data entry Form to be filled in for an Area of Special Conservation Interest: see Appendix 13 to this document

Resolution No. 6 (1998) of the Standing Committee listing the species requiring specific habitat conservation measures

(adopted by the Standing Committee on 4 December 1998)

The Standing Committee of the Convention on the Conservation of European Wildlife and Natural Habitats, acting under the terms of Article 14 of the convention,

Having regard to its Resolution No. 1 (1989) on the provisions relating to the conservation of habitats;

Having regard to its Recommendation No. 14 (1989) on species habitat conservation and on the conservation of endangered natural habitat types;

Conscious that habitat protection measures are only a part of the measures required for the long term conservation of species;

Taking into account the reservations made by the Contracting Parties at the time of signature or when depositing its instruments of ratification, acceptance, approval or accession;

Taking note of the conclusions of the Council of the European Union of 6 October 1995: "The Council notes that the European Union will be represented in the framework of the Strategy (pan-European Biological and Landscape Diversity Strategy) by Natura 2000", for the European Union the list of species requiring special habitat conservation measures corresponds to Annex II of the Council Directive 92/43/EEC, such as modified by Directive 97/621/CEE and to Annex I of the Council Directive 79/409/EEC of 2 April 1979;

Conscious that some species listed may be abundant in parts of Europe and may not require specific habitat conservation measures everywhere, and marking those species with the sign (#);

Recalling that some species listed may be abundant in some of the Member States of the European Union, and that the appropriate notes in Annex II of the Council Directive 92/43/EEC need to be taken into account for European Union Member States, and marking those species with the sign ¹;

Noting that some species or subspecies listed are not included in Appendices I or II of the Convention, although they appear in Annex II of the Council Directive 92/43/EEC such as modified by Directive 96/62/CEE or in Annex I of the Council Directive 79/409/EEC, and marking those species with the sign ²,

1. Resolves to identify the species in Appendix 1 to this resolution as requiring specific habitat conservation measures;

Appendix 1

Species requiring specific habitat conservation measures

PLANTS / PLANTES

PTERIDOPHYTA

ASPLENIACEAE Asplenium jahandiezii (Litard.) Rouy

BLECHNACEAE Woodwardia radicans (L.) Sm.

DICKSONIACEAE Culcita macrocarpa C. Presl

DRYOPTERIDACEAE Diplazium sibiricum (Turcz. ex Kunze) Kurata Dryopteris corleyi Fraser-Jenk. Dryopteris fragans (L.) Schott

HYMENOPHYLLACEAE Trichomanes speciosum Willd.

ISOETACEAE

Isoetes boryana Durieu

Isoetes malinverniana Ces. & De Not.

MARSILEACEAE

Marsilea batardae Launert

Marsilea quadrifolia L.

Marsilea strigosa Willd.

OPHIOGLOSSACEAE

Botrychium simplex Hitchc.

Ophioglossum polyphyllum A. Braun

GYMNOSPERMAE

PINACEAE

Abies nebrodensis (Lojac.) Mattei

ANGIOSPERMAE

ALISMATACEAE

Alisma wahlenbergii (Holmberg) Juz.

Caldesia parnassifolia (L.) Parl.

Luronium natans (L.) Raf.

AMARYLLIDACEAE

Leucojum nicaeense Ard.

Narcissus angustifolius Curt.

Narcissus asturiensis (Jordan) Pugsley

Narcissus calcicola Mendonça

Narcissus cyclamineus DC.

Narcissus fernandesii G. Pedro

Narcissus humilis (Cav.) Traub

Naccissus numins (Cav.) Hau

Narcissus nevadensis Pugsley

Narcissus pseudonarcissus L. subsp. nobilis (Haw.) A. Fernandes

Narcissus scaberulus Henriq.

Narcissus triandrus L. subsp. capax (Salisb.) D. A. Webb.

Narcissus viridiflorus Schousboe

Sternbergia candida B.

ARISTOLOCHIACEAE

Aristolochia samsunensis Davis

ASCLEPIADACEAE

Vincetoxicum pannonicum (Borhidi) Holub

BORAGINACEAE

Anchusa crispa Viv.

Lithodora nitida (H. Ern) R. Fernandes

Myosotis lusitanica Schuster

Myosotis rehsteineri Wartm.

Myosotis retusifolia R. Afonso

Onosma halophilum Boiss. & Heldr.

Onosma polyphylla Lebed.

Onosma proponticum Aznav.

Omphalodes kuzinskyanae Willk.

Omphalodes littoralis Lehm.

Solenanthus albanicus (Degen & al.) Degen & Baldacci

Symphytum cycladense Pawl.

CAMPANULACEAE

Asyneuma giganteum (Boiss.) Bornm.

Campanula damboldtiana

Campanula gelida Kovanda

Campanula lycica

Campanula romanica Savul.

Campanula sabatia De Not.

Jasione crispa (Pourret) Samp. subsp. serpentinica Pinto da Silva

Jasione lusitanica A. DC.

CARYOPHYLLACEAE

Arenaria ciliata L. ssp. pseudofrigida Ostenf. & O.C. Dahl

Arenaria humifusa Wahlenberg

Arenaria nevadensis Boiss. & Reuter

Arenaria provincialis Chater & Halliday

Cerastium alsinifolium Tausch

Dianthus arenarius L. subsp. arenarius

Dianthus cintranus Boiss. & Reuter subsp. cintranus Boiss. & Reuter

Dianthus hypanicus Andrz.

Dianthus marizii (Samp.) Samp.

Dianthus nitidus Waldst. et Kit.

Dianthus rupicola Biv.

Dianthus serotinus Waldst. et Kit.

Dianthus urumoffii Stoj. et Acht.

Gypsophila papillosa P. Porta

Herniaria algarvica Chaudhri

Herniaria latifolia Lapeyr. subsp. litardierei Gamis

Herniaria lusitanica (Chaudhri) subsp. berlengiana Chaudhri

Herniaria maritima Link

Minuartia smejkalii Dvorakova

Moehringia hypanica Grynj. et Klok.

Moehringia lateriflora (L.) Fenzl.

Moehringia tommasinii Marches.

Petrocoptis grandiflora Rothm.

Petrocoptis montsicciana O. Bolos & Rivas Mart.

Petrocoptis pseudoviscosa Fernandez Casas

Saponaria halophila

Silene cretacea Fisch. ex Spreng.

Silene furcata Rafin. ssp. angustiflora (Rupr.) Walters

Silene hicesiae Brullo & Signorello

Silene hifacensis Rouy ex Willk.

Silene holzmanii Heldr. ex Boiss.

Silene longicilia (Brot.) Otth.

Silene mariana Pau

Silene orphanidis Boiss. Silene rothmaleri Pinto da Silva

Silene salsuginae Hub.-Mor.

Silene sangaria Coode & Cullen

Silene velutina Pourret ex Loisel.

CHENOPODIACEAE

Bassia (Kochia) saxicola (Guss.) A. J. Scott

Beta trojana Pamuk. apud Aellen

Microcnemum coralloides subsp. anatolicum

Suaeda cucullata Aellen

Salicornia veneta Pignatti & Lausi

CISTACEAE

Cistus palhinhae Ingram

Halimium verticillatum (Brot.) Sennen

Helianthemum arcticum (Grosser) Janch.

Helianthemum alypoides Losa & Rivas Goday

Helianthemum caput-felis Boiss.

Tuberaria major (Willk.) Pinto da Silva & Rozeira

COMPOSITAE

Achillea glaberrima Klok.

Achillea thracica Velen.

Anacyclus latealatus Hub.-Mor.

Andryala levitomentosa (E. I. Nayardy) P. D. Sell

Anthemis glaberrima (Rech. f.) Greuter

Anthemis halophila Boiss. & Bal.

Artemisia campestris L. subsp. bottnica A.N. Lundström ex Kindb.

Artemisia granatensis Boiss.

Artemisia laciniata Willd.

Artemisia oelandica (Besser) Komaror

Artemisia pancicii (Janka) Ronn.

Aster pyrenaeus Desf. ex DC

Aster sorrentinii (Tod) Lojac.

Carduus myriacanthus Salzm. ex DC.

Centaurea akamantis Th Georgiades & G Chatzikyriakou

Centaurea alba L. subsp. heldreichii (Halacsy) Dostal

Centaurea alba L. subsp. princeps (Boiss. & Heldr.) Gugler

Centaurea attica Nyman subsp. megarensis (Halacsy & Hayek) Dostal

Centaurea balearica J. D. Rodriguez

Centaurea borjae Valdes-Berm. & Rivas Goday

Centaurea citricolor Font Quer

Centaurea corymbosa Pourret

Centaurea dubjanskyi Iljin.

Centaurea gadorensis G. Blanca

Centaurea hermannii F. Hermann

Centaurea horrida Badaro

Centaurea jankae Brandza

Centaurea kalambakensis Freyn & Sint.

Centaurea kartschiana Scop.

Centaurea lactiflora Halacsy

Centaurea micrantha Hoffmanns. & Link subsp. herminii (Rouy) Dostál

Centaurea niederi Heldr.

Centaurea peucedanifolia Boiss. & Orph.

Centaurea pinnata Pau

Centaurea pineticola Iljin.

Centaurea pontica Prodan & E. I. Nayardy

Centaurea pseudoleucolepis Kleop

Centaurea pulvinata (G. Blanca) G. Blanca

Centaurea rothmalerana (Arènes) Dostál

Centaurea tchihatcheffii Fich. & Mey

Centaurea vicentina Mariz

Crepis crocifolia Boiss. & Heldr.

Crepis granatensis (Willk.) B. Blanca & M. Cueto

Crepis tectorum L. subsp. nigrescens

Dendranthema zawadskyi (Herb.) Tzvel.

Erigeron frigidus Boiss. ex DC.

Hymenostemma pseudanthemis (Kunze) Willd.

Jurinea cyanoides (L.) Reichenb.

Jurinea fontqueri Cuatrec.

Lagoseris purpurea (Willd.) Boiss.

Lamyropsis microcephala (Moris) Dittrich & Greuter

Leontodon microcephalus (Boiss. ex DC.) Boiss.

Leontodon boryi Boiss.

Leontodon siculus (Guss.) Finch & Sell

Leuzea longifolia Hoffmanns. & Link

Ligularia sibirica (L.) Cass.

Santolina impressa Hoffmanns. & Link

Santolina semidentata Hoffmanns. & Link

Senecio elodes Boiss. ex DC.

Senecio jacobea L. subsp. gotlandicus (Neuman) Sterner

Senecio nevadensis Boiss. & Reuter

Serratula tanaitica P. Smirn.

Sonchus erzincanicus Matthews

CONVOLVULACEAE

Convolvulus argyrothamnus Greuter

Convolvulus fernandesii Pinto da Silva & Teles

Convolvulus pulvinatus Sa'ad

CRUCIFERAE

Alyssum pyrenaicum Lapeyr.

Arabis sadina (Samp.) P. Cout.

Armoracia macrocarpa (Waldst. & Kit.) Kit. ex Baumg

Biscutella neustriaca Bonnet

Biscutella vincentina (Samp.) Rothm. Boleum asperum (Pers.) Desvaux

Brassica glabrescens Poldini

Brassica insularis Moris

Brassica macrocarpa Guss.

Brassica sylvestris (l.) Mill. subsp. taurica Tzvel.

Braya linearis Rouy

Cochlearia polonica Frohlich

Coincya rupestris Rouy

Coronopus navasii Pau

Crambe koktebelica (Junge) N. Busch.

Crambe litwinonowii K. Gross.

Diplotaxis ibicensis (Pau) Gomez-Campo

Diplotaxis siettiana Maire

Diplotaxis vicentina (P. Cout.) Rothm.

Draba cacuminum Elis Ekman

Draba cinerea Adams

Erucastrum palustre (Pirona) Vis.

Erysimum pieninicum (Zapal.) Pawl.

Iberis arbuscula Runemark

Iberis procumbens Lange subsp. microcarpa Franco & Pinto da Silva

Jonopsidium acaule (Desf.) Reichenb.

Jonopsidium savianum (Caruel) Ball ex Arcang.

Lepidium turczaninowii Lipsky.

Rhynchosinapis erucastrum (L.) Dandy ex Clapham subsp. cintrana (Coutinho)

Franco & P. Silva (Coincya cintrana (P. Cout.) Pinto da Silva)

Schivereckia podolica (Besser) Andrz.

Sisymbrium cavanillesianum Valdes & Castroviejo

Sisymbrium supinum L.

Thlaspi cariense

CYPERACEAE

Carex holostoma Drejer

Carex panormitana Guss.

Eleocharis carniolica Koch

DIOSCOREACEAE

Borderea chouardii (Gaussen) Heslot

DIPSACACEAE

Dipsacus cephalarioides

DROSERACEAE

Aldrovanda vesiculosa L.

ERICACEAE

Vaccinium arctostaphylos L.

EUPHORBIACEAE

Euphorbia margalidiana Kuhbier & Lewejohann

Euphorbia transtagana Boiss.

GENTIANACEAE

Centaurium rigualii Esteve

Centaurium somedanum Lainz

Gentiana ligustica R. de Vilm. & Chopinet

Gentianella anglica (Pugsley) E. F. Warburg

GERANIACEAE

Erodium astragaloides Boiss. & Reuter

Erodium paularense Fernandez-Gonzalez & Izco

Erodium rupicola Boiss.

GLOBULARIACEAE

Globularia stygia Orph. ex Boiss.

GRAMINEAE

Arctagrostis latifolia (R. Br.) Griseb.

Arctophila fulva (Trin.) N. J. Anderson

Avenula hackelii (Henriq.) Holub

Bromus grossus Desf. ex DC.

Bromus psammophilus

Calamagrostis chalybaea (Laest.) Fries

Cinna latifolia (Trev.) Griseb.

Coleanthus subtilis (Tratt.) Seidl

Eremopoa mardinensis

Festuca brigantina (Markgr.-Dannenb.) Markgr.-Dannenb.

Festuca duriotagana Franco & R. Afonso

Festuca elegans Boiss.

Festuca henriquesii Hack.

Festuca summilusitana Franco & R. Afonso

Gaudinia hispanica Stace & Tutin

Holcus setiglumis Boiss. & Reuter subsp. duriensis Pinto da Silva

Micropyropsis tuberosa Romero - Zarco & Cabezudo

Poa granitica Br.- Bl.

Poa riphaea (Ascherson et Graebner) Fritsch

Pseudarrhenatherum pallens (Link) J. Holub

Puccinellia phryganodes (Trin.) Scribner + Merr.

Puccinellia pungens (Pau) Paunero

Stipa austroitalica Martinovsky

Stipa bavarica Martinovsky & H. Scholz

Stipa danubialis Dihoru & Roman

Stipa styriaca Martinovsky

Stipa syreistschikowii P. Smirn.

Stipa veneta Moraldo

Trisetum subalpestre (Hartman) Neuman

GROSSULARIACEAE

Ribes sardoum Martelli

HIPPURIDACEAE

Hippuris tetraphylla L. Fil.

HYPERICACEAE

Hypericum aciferum (Greuter) N.K.B. Robson

Hypericum salsugineum

IRIDACEAE

Crocus abantensis

JUNCACEAE

Juncus valvatus Link

Luzula arctica Blytt #

LABIATAE

Dracocephalum austriacum L.

Micromeria taygetea P. H. Davis

Nepeta dirphya (Boiss.) Heldr. ex Halacsy

Nepeta sphaciotica P. H. Davis

Origanum dictamnus L.

Sideritis incana subsp. glauca (Cav.) Malagarriga

Sideritis javalambrensis Pau

Sideritis serrata Cav. ex Lag.

Teucrium lepicephalum Pau

Teucrium turredanum Losa & Rivas Goday

Thymus camphoratus Hoffmanns. & Link

Thymus carnosus Boiss.

Thymus lotocephalus G. López & R. Morales (Thymus cephalotos L.)

LEGUMINOSAE

Anthyllis hystrix Cardona, Contandr. & E. Sierra

Astragalus aitosensis Ivanisch.

Astragalus algarbiensis Coss. ex Bunge

Astragalus aquilanus Anzalone

Astragalus centralpinus Braun-Blanquet

Astragalus kungurensis Boriss.

Astragalus maritimus Moris

Astragalus peterfii Jav.

Astragalus physocalyx Fischer

Astragalus tremolsianus Pau

Astragalus setosulus Gontsch.

Astragalus tanaiticus C. Koch.

Astragalus verrucosus Moris

Cytisus aeolicus Guss. ex Lindl.

Genista dorycnifolia Font Quer

Genista holopetala (Fleischm. ex Koch) Baldacci

Genista tetragona Bess.

Glycyrrhiza iconica

 $He dy sarum\ razoumovianum\ Fisch.\ et\ Helm.$

Melilotus segetalis (Brot.) Ser. subsp. fallax Franco

Ononis hackelii Lange

Sphaerophysa kotschyana

Thermopsis turcica

Trifolium banaticum (Heuffel) Majovsky

Trifolium pachycalyx

Trifolium saxatile All.

Trigonella arenicola

Trigonella halophila

Trigonella polycarpa

Vicia bifoliolata J.D. Rodriguez

LENTIBULARIACEAE

Pinguicula nevadensis (Lindb.) Casper

LILIACEAE

Allium grosii Font Quer

Allium regelianum A. Beck.

Allium vuralii

Androcymbium rechingeri Greuter

Asparagus lycaonicus

Asphodelus bento-rainhae P. Silva

Chionodoxa luciliae

Colchicum davidovii Stef.

Colchicum fominii Bordz.

Colchicum micranthum

Fritillaria montana Hoppe.

Hyacinthoides vicentina (Hoffmans. & Link) Rothm.

Lilium jankae A. Kerner

Lilium rhodopaeum Delip.

Muscari gussonei (Parl.) Tod.

Tulipa hungarica Borbas

LINACEAE

Linum dolomiticum Borbas

Linum muelleri Moris (Linum maritimum muelleri)

LYTHRACEAE

Lythrum flexuosum Lag.

MALVACEAE

Kosteletzkya pentacarpos (L.) Ledeb.

NAJADACEAE

Najas flexilis (Willd.) Rostk. & W.L. Schmidt

Najas tenuissima (A. Braun) Magnus

OLEACEAE

Syringa josikaea Jacq. fil.

ORCHIDACEAE

Calypso bulbosa L.

Cephalanthera cucullata Boiss. & Heldr.

Cypripedium calceolus L.

Dactylorhiza chuhensis

Gymnigritella runei Teppner & Klein

Liparis loeselii (L.) Rich.

Ophrys isaura

Ophrys lunulata Parl.

Ophrys lycia

Platanthera obtusata (Pursh) subsp. oligantha (Turez.) Hulten

Steveniella satyrioides (Stev.) Schlechter.

PAEONIACEAE

Paeonia cambessedesii (Willk.) Willk.

Paeonia parnassica Tzanoudakis

Paeonia clusii F.C. Stern subsp. rhodia (Stearn) Tzanoudakis

Paeonia tenuifolia L.

PALMAE

Phoenix theophrasti Greuter

PAPAVERACEAE

Corydalis gotlandica Lidén

Papaver laestadianum (Nordh.) Nordh.

Papaver radicatum Rottb. subsp. hyperboreum Nordh.

PLANTAGINACEAE

Plantago algarbiensis Sampaio (Plantago bracteosa (Willk.) G. Sampaio)

Plantago almogravensis Franco

PLUMBAGINACEAE

Armeria berlengensis Daveau

Armeria helodes Martini & Pold

Armeria neglecta Girard

Armeria pseudarmeria (Murray) Mansfeld

Armeria rouyana Daveau

Armeria soleirolii (Duby) Godron

Armeria velutina Welw. ex Boiss. & Reuter

Limonium anatolicum

Limonium dodartii (Girard) O. Kuntze subsp. lusitanicum (Daveau) Franco

Limonium insulare (Beg. & Landi) Arrig. & Diana

Limonium lanceolatum (Hoffmans. & Link) Franco

Limonium multiflorum Erben

Limonium pseudolaetum Arrig. & Diana

Limonium strictissimum (Salzmann) Arrig.

Limonium tamaricoides

POLYGONACEAE

Persicaria foliosa (H. Lindb.) Kitag.

Polygonum praelongum Coode & Cullen

Rheum rhaponticum L

Rumex rupestris Le Gall

PRIMULACEAE

Androsace mathildae Levier

Androsace pyrenaica Lam.

Cyclamen kuznetzovii Kotov et Czernova

Cyclamen mirabile

Primula apennina Widmer

Primula nutans Georgi

Primula palinuri Petagna

Primula scandinavica Bruun #

Soldanella villosa Darracq.

RANUNCULACEAE

Aconitum corsicum Gayer (Aconitum napellus subsp. corsicum)

Aconitum flerovii Steinb.

Adonis distorta Ten.

Anemone uralensis Nevski.

Aquilegia bertolonii Schott

Aquilegia kitaibelii Schott

Aquilegia pyrenaica D.C. subsp. cazorlensis (Heywood) Galiano

Consolida samia P.H. Davis

Pulsatilla grandis Wend. (Pulsatilla halleri (All.) Willd. subsp. grandis (Wend.) Meikle

Pulsatilla patens (L.) Miller

Pulsatilla vulgaris Hill. subsp. gotlandica (Johanss.) Zaemelis & Paegle

Ranunculus lapponicus L.

Ranunculus weyleri Mares

RESEDACEAE

Reseda decursiva Forssk.

ROSACEAE

Agrimonia pilosa Ledebour

Potentilla emilii-popii E. I. Nayardy

Potentilla delphinensis Gren. & Godron

Potentilla silesiaca Uechtr.

Pyrus anatolica

Sorbus teodori Liljefors

RUBIACEAE

Galium cracoviense Ehrend.

Galium globuliferum

Galium litorale Guss.

Galium moldavicum (Dobrescu) Franco

Galium viridiflorum Boiss. & Reuter

SALICACEAE

Salix salvifolia Brot. subsp. australis Franco

SANTALACEAE

Thesium ebracteatum Hayne

SAXIFRAGACEAE

Saxifraga berica (Beguinot) D.A. Webb

Saxifraga florulenta Moretti

Saxifraga hirculus L. #

Saxifraga osloënsis Knaben

Saxifraga tombeanensis Boiss. ex Engl.

SCROPHULARIACEAE

Antirrhinum charidemi Lange

Chaenorrhinum serpyllifolium (Lange) Lange subsp. lusitanicum R. Fernandes

Euphrasia genargentea (Feoli) Diana

Euphrasia marchesettii Wettst. ex Marches.

Linaria algarviana Chav.

Linaria coutinhoi Valdés

Linaria ficalhoana Rouy

Linaria flava (Poiret) Desf.

Linaria hellenica Turrill

Linaria ricardoi Cout.

Linaria tursica B. Valdes & Cabezudo

Linaria tonzigii Lona

Odontites granatensis Boiss.

Pedicularis sudetica Willd.

Verbascum basivelatum

Verbascum degenii

Verbascum litigiosum Samp.

Verbascum purpureum (Janka) Huber-Morath

Verbascum stepporum

Veronica micrantha Hoffmanns. & Link

Veronica euxina Turrill

Veronica oetaea L.-A. Gustavsson

Veronica turrilliana Stoj. et Stef.

SOLANACEAE

Atropa baetica Willk.

THYMELAEACEAE

Daphne petraea Leybold

Daphne rodriguezii Texidor

ULMACEAE

Zelkova abelicea (Lam.) Boiss.

UMBELLIFERAE

Angelica heterocarpa Lloyd

Angelica palustris (Besser) Hoffm.

Apium bermejoi Llorens

Apium repens (Jacq.) Lag.

Athamanta cortiana Ferrarini

Bupleurum capillare Boiss. & Heldr.

Bupleurum kakiskalae Greuter

Eryngium alpinum L.

Eryngium viviparum Gay

Ferula halophila

Laserpitium longiradium Boiss.

Naufraga balearica Constans & Cannon

Oenanthe conioides Lange

Petagnia saniculifolia Guss.

Rouya polygama (Desf.) Coincy

Seseli intricatum Boiss.

Thorella verticillatinundata (Thore) Brig.

VALERIANACEAE

Centranthus kellereri (Stoj. Stef. et Georg.) Stoj. et Stef.

Centranthus trinervis (Viv.) Beguinot

VIOLACEAE

Viola hispida Lam.

Viola jaubertiana Mares & Vigineix

Viola rupestris F.W. Schmidt subsp. relicta Jalas

BRYOPHYTA

Bruchia vogesiaca Schwaegr.

Bryhnia novae-angliae (Sull & Lesq.) Grout

Bryoerythrophyllum campylocarpum (C. Müll.) Crum. (Bryoerythrophyllum machadoanum (Sergio)

M.O. Hill)

Buxbaumia viridis (Moug.) Moug. & Nestl.

Cephalozia macounii (Aust.) Aust.

Cynodontium suecicum (H. Arn. & C. Jens.) I. Hag.

Dichelyma capillaceum (Dicks) Myr.

Dicranum viride (Sull. & Lesq.) Lindb.

Distichophyllum carinatum Dix. & Nich.

Drepanocladus (Hamatocaulis) vernicosus (Mitt.) Warnst.

Encalypta mutica (I. Hagen)

Hamatocaulis lapponicus (Norrl.) Hedenäs

Herzogiella turfacea (Lindb.) I. Wats.

Hygrohypnum montanum (Lindb.) Broth.

Jungermannia handelii (Schiffn.) Amak.

Mannia triandra (Scop.) Grolle

Marsupella profunda Lindb.

Meesia longiseta Hedw.

Nothothylas orbicularis (Schwein.) Sull.

Orthothecium lapponicum (Schimp.) C. Hartm.

Orthotrichum rogeri Brid.

Petalophyllum ralfsii (Wils.) Nees & Gott.

Plagiomnium drummondii (Bruch & Schimp.) T. Kop.

Riccia breidleri Jur.

Riella helicophylla (Bory & Mont.) Mont.

Scapania massolongi (K. Müll.) K. Müll.

Sphagnum pylaisii Brid.

Tayloria rudolphiana (Garov) B. & S.

Tortella rigens (N. Alberts)

SPECIES FROM THE MACARONESIAN REGION ESPÈCES DE LA REGION MACARONÉSIENNE

PTERIDOPHYTA

HYMENOPHYLLACEAE

Hymenophyllum maderensis Gibby & Lovis

DRYOPTERIDACEAE

Polystichum drepanum (Sw.) C. Presl.

ISOETACEAE

Isoetes azorica Durieu & Paiva ex Milde

MARSILEACEAE

Marsilea azorica Launert & Paiva

ANGIOSPERMAE

ASCLEPIADACEAE

Caralluma burchardii N. E. Brown

Ceropegia chrysantha Svent.

BORAGINACEAE

Echium candicans L. fil.

Echium gentianoides Webb & Coincy

Myosotis azorica H. C. Watson

Myosotis maritima Hochst. in Seub.

CAMPANULACEAE

Azorina vidalii (H. C. Watson) Feer

Musschia aurea (L. f.) DC.

Musschia wollastonii Lowe

CAPRIFOLIACEAE

Sambucus palmensis Link

CARYOPHYLLACEAE

Spergularia azorica (Kindb.) Lebel

CELASTRACEAE

Maytenus umbellata (R. Br.) Mabb.

CHENOPODIACEAE

Beta patula Ait.

CISTACEAE

Cistus chinamadensis Bañares & Romero Helianthemum bystropogophyllum Svent.

COMPOSITAE

Andryala crithmifolia Ait.

Argyranthemum lidii Humphries

Argyranthemum thalassophylum (Svent.) Hump.

Argyranthemum winterii (Svent.) Humphries

Atractylis arbuscula Svent. & Michaelis

Atractylis preauxiana Schultz.

Calendula maderensis DC.

Cheirolophus duranii (Burchard) Holub

Cheirolophus ghomerytus (Svent.) Holub

Cheirolophus junonianus (Svent.) Holub

Cheirolophus massonianus (Lowe) Hansen & Sund.

Cirsium latifolium Lowe

Helichrysum gossypinum Webb

Helichrysum monogynum Burtt & Sund.

Hypochoeris oligocephala (Svent. & Bramw.) Lack

Lactuca watsoniana Trel.

Onopordum nogalesii Svent.

Onorpordum carduelinum Bolle

Pericallis hadrosoma (Svent.) B. Nord.

Phagnalon benettii Lowe

Stemmacantha cynaroides (Chr. Son. in Buch) Ditt

Sventenia bupleuroides Font Quer

Tanacetum ptarmiciflorum Webb & Berth

CONVOLVULACEAE

Convolvulus caput-medusae Lowe

Convolvulus lopez-socasii Svent.

Convolvulus massonii A. Dietr.

CRASSULACEAE

Aeonium gomeraense Praeger

Aeonium saundersii Bolle

Aichryson dumosum (Lowe) Praeg.

Monanthes wildpretii Banares & Scholz

Sedum brissemoretii Raymond-Hamet

CRUCIFERAE

Crambe arborea Webb ex Christ

Crambe laevigata DC. ex Christ

Crambe sventenii R. Petters ex Bramwell & Sund.

Parolinia schizogynoides Svent.

Sinapidendron rupestre (Ait.) Lowe

CYPERACEAE

Carex malato-belizii Raymond

DIPSACACEAE

Scabiosa nitens Roemer & J. A. Schultes

ERICACEAE

Erica scoparia L. subsp. azorica (Hochst.) D. A. Webb

EUPHORBIACEAE

Euphorbia handiensis Burchard

Euphorbia lambii Svent.

Euphorbia stygiana H. C. Watson

GERANIACEAE

Geranium maderense P. F. Yeo

GRAMINEAE

Deschampsia maderensis (Haeck. & Born.) Buschm.

Phalaris maderensis (Menezes) Menezes

GLOBULARIACEAE

Globularia ascanii D. Bramwell & Kunkel

Globularia sarcophylla Svent.

LABIATAE

Sideritis cystosiphon Svent.

Sideritis discolor (Webb ex de Noe) Bolle

Sideritis infernalis Bolle

Sideritis marmorea Bolle

Teucrium abutiloides L'Hér. Teucrium betonicum L'Hér.

LEGUMINOSAE

Anagyris latifolia Brouss. ex. Willd.
Anthyllis lemanniana Lowe
Dorycnium spectabile Webb & Berthel
Lotus azoricus P. W. Ball
Lotus callis-viridis D. Bramwell & D. H. Davis
Lotus kunkelii (E. Chueca) D. Bramwell & al.
Teline rosmarinifolia Webb & Berthel.
Teline salsoloides Arco & Acebes.
Vicia dennesiana H. C. Watson

LILIACEAE

Androcymbium psammophilum Svent. Scilla maderensis Menezes Semele maderensis Costa LORANTHACEAE Arceuthobium azoricum Wiens & Hawksw.

MYRICACEAE

Myrica rivas-martinezii Santos.

OLEACEAE

Jasminum azoricum L. Picconia azorica (Tutin) Knobl.

ORCHIDACEAE

Goodyera macrophylla Lowe

PITTOSPORACEAE

Pittosporum coriaceum Dryand. ex. Ait.

PLANTAGINACEAE

Plantago malato-belizii Lawalree

PLUMBAGINACEAE

Limonium arborescens (Brouss.) Kuntze Limonium dendroides Svent. Limonium spectabile (Svent.) Kunkel & Sunding Limonium sventenii Santos & Fernandez Galvan

POLYGONACEAE

Rumex azoricus Rech. fil.

RHAMNACEAE

Frangula azorica Tutin

ROSACEAE

Bencomia brachystachya Svent.
Bencomia sphaerocarpa Svent.
Chamaemeles coriacea Lindl.
Dendriopoterium pulidoi Svent.
Marcetella maderensis (Born.) Svent.
Prunus lusitanica L. subsp. azorica (Mouillef.) Franco
Sorbus maderensis (Lowe) Dode

SANTALACEAE

Kunkeliella subsucculenta Kammer

SCROPHULARIACEAE

Euphrasia azorica H.C. Watson Euphrasia grandiflora Hochst. in Seub. Isoplexis chalcantha Svent. & O'Shanahan Isoplexis isabelliana (Webb & Berthel.) Masferrer Odontites holliana (Lowe) Benth. Sibthorpia peregrina L.

SOLANACEAE

Solanum lidii Sunding

UMBELLIFERAE

Ammi trifoliatum (H. C. Watson) Trelease Bupleurum handiense (Bolle) Kunkel

Chaerophyllum azoricum Trelease

Ferula latipinna Santos

Melanoselinum decipiens (Schrader & Wendl.) Hoffm.

Monizia edulis Lowe

Oenanthe divaricata (R. Br.) Mabb.

Sanicula azorica Guthnick ex Seub.

VIOLACEAE

Viola paradoxa Lowe

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BRYOPHYTA

Echinodium spinosum (Mitt.) Jur.

Thamnobryum fernandesii Sergio

VERTEBRATES/VERTÉBRÉS

Mammals/Mammifères

INSECTIVORA

Talpidae

Desmana moschata

Galemys pyrenaicus

CHIROPTERA

Rhinolophidae

Rhinolophus blasii

Rhinolophus euryale

Rhinolophus ferrumequinum

Rhinolophus hipposideros

Rhinolophus mehelyi

Vespertilionidae

Barbastella barbastellus

Eptesicus bottae

Miniopterus schreibersi

Myotis bechsteini

Myotis blythii

Myotis capaccinii

Myotis dasycneme

Myotis emarginatus

Myotis myotis

RODENTIA

Sciuridae

Pteromys volans (Sciuropterus russicus)#

Spermophilus citellus (Citellus citellus)#

Spermophilus suslicus (Citellus suslicus) #

Castoridae

Castor fiber # 1, 2

Microtidae

Microtus cabrerae

Microtus oeconomus arenicola # 2

Microtus tatricus

Spalax graecus

Cricetidae

Mesocricetus newtoni

CARNIVORA

Canidae

Alopex lagopus #

Canis lupus #

Cuon alpinus

Ursidae

Ursus arctos # 1

Ursus maritimus

Mustelidae

Gulo gulo#

Lutra lutra #

Mustela lutreola

Felidae

Caracal caracal

Lynx lynx # Lynx pardinus

Panthera pardus

Odobenidae

Odobenus rosmarus

Phocidae

Halichoerus grypus # 2

Monachus monachus

Phoca hispida bottnica 2

Phoca hispida saimensis

Phoca hispida ladogensis

Phoca vitulina # 2

ARTIODACTYLA

Cervidae

Cervus elaphus corsicanus

Rangifer tarandus fennicus ²

Bovidae

Capra aegagrus (natural populations/populations naturelles)

Capra pyrenaica pyrenaica

Gazella subgutturosa

Gazella dorcas

Ovis gmelini musimon (Ovis ammon musimon) (natural populations - Corsica and Sardinia / populations naturelles - Corse et

Rupicapra pyrenaica ornata (Rupicapra rupicapra ornata)

Rupicapra rupicapra balcanica

CETACEA

Delphinidae

Tursiops truncatus #

Phocoenidae

Phocoena phocoena #

Birds/Oiseaux

GAVIIFORMES

Gaviidae

Gavia adamsii

Gavia arctica

Gavia immer

Gavia stellata

PODICIPEDIFORMES

Podicipedidae

Podiceps auritus

PROCELLARIIFORMES

Hydrobatidae

Hydrobates pelagicus #

Oceanodroma castro

Oceanodroma leucorhoa #

Pelagodroma marina

Procellariidae

Bulweria bulwerii

Calonectris diomedea (Procellaria diomedea)

Puffinus assimilis

Puffinus yelkouan mauretanicus (Puffinus puffinus mauretanicus)

Puffinus yelkouan (Puffinus puffinus yelkouan)¹

Pterodroma feae

Pterodroma madeira

PELECANIFORMES

Phalacrocoracidae

Phalacrocorax aristotelis desmarestii ²

Phalacrocorax pygmaeus

Pelecanidae

Pelecanus crispus

Pelecanus onocrotalus

CICONIIFORMES

Ardeidae

Ardea purpurea

Ardeola ralloides

Botaurus stellaris

Casmerodius albus (Egretta alba)

Egretta garzetta

Ixobrychus minutus

Nycticorax nycticorax

Ciconiidae

Ciconia nigra

Ciconia ciconia

Threskiornithidae

Plegadis falcinellus

Platalea leucorodia

Phoenicopteridae

Phoenicopterus ruber

ANSERIFORMES

Anatidae

Anser albifrons flavirostris 2

Anser erythropus

Aythya nyroca 2

Branta leucopsis

Branta ruficollis

Bucephala islandica

Cygnus bewickii (Cygnus columbianus bewickii) #

Cygnus cygnus #

Histrionicus histrionicus

Marmaronetta angustirostris (Anas angustirostris)

Mergus albellus

Oxyura leucocephala

Tadorna ferruginea

FALCONIFORMES

Accipitridae

Accipiter brevipes

Accipiter gentilis arrigonii

Accipiter nisus granti

Aegypius monachus

Aquila adalberti

Aquila chrysaetos

Aquila clanga

Aquila heliaca

Aquila nipalensis Aquila pomarina

Buteo rufinus

Circaetus gallicus Circus aeruginosus

Circus cyaneus

Circus macrourus

Circus pygargus

Elanus caeruleus

Gypaetus barbatus Gyps fulvus

Haliaeetus albicilla

Hieraaetus fasciatus

Hieraaetus pennatus

Milvus migrans

Milvus milvus

Neophron percnopterus

Pernis apivorus

Pandionidae

Pandion haliaetus

Falconidae

Falco biarmicus

Falco columbarius #

Falco eleonorae

Falco naumanni

Falco peregrinus

Falco rusticolus Falco vespertinus

GALLIFORMES

Tetraonidae

Bonasa bonasia $^{\rm 2}$

Lagopus mutus helveticus ²

Lagopus mutus pyrenaicus ²

Tetrao tetrix tetrix ²
Tetrao urogallus ² (only T.u. cantabricus in App II / seulement T.u.cantabricus est à l'annexe II)

Phasianidae

Alectoris barbara ²

Alectoris graeca saxatilis 2 Alectoris graeca whitakeri 2

Perdix perdix hispaniolensis 2

Perdix perdix italica 2

GRUIFORMES

Turnicidae

Turnix sylvatica

Rallidae

Crex crex

Fulica cristata

Porphyrio porphyrio

Porzana parva

Porzana porzana

Porzana pusilla

Gruidae

Grus grus

Otididae

Chlamydotis undulata

Otis tarda

Tetrax tetrax

CHARADRIIFORMES

Charadriidae

Charadrius asiaticus ²

Charadrius leschenaultii

Charadrius morinellus (Eudromias morinellus)

Chettusia gregaria 2

Hoplopterus spinosus

Pluvialis apricaria # 2

Scolopacidae

Gallinago media Limosa lapponica

Numenius tenuirostris

Philomachus pugnax

Tringa glareola

Xenus cinereus (Tringa cinereus) ²

Recurvirostridae

Himantopus himantopus

Recurvirostra avosetta

Phalaropodidae

Phalaropus fulicarius

Phalaropus lobatus Burhinidae

Burhinus oedicnemus

Glareolidae

Cursorius cursor

Glareola nordmanni

Glareola pratincola

Laridae

Chlidonias hybridus

Chlidonias leucopterus

Chlidonias niger

Gelochelidon nilotica

Larus audouinii

Larus genei

Larus melanocephalus

Pagophila eburnea

Sterna albifrons

Sterna caspia (Hydroprogne caspia)

Sterna dougallii

Sterna hirundo

Sterna paradisaea (macrura)

Sterna sandvicensis

Alcidae

Uria aalge ibericus ²

COLUMBIFORMES

Pteroclididae

Pterocles alchata

Pterocles orientalis

Columbidae

Columba bollii

Columba junoniae

Columba palumbus azorica ²

Columba trocaz

STRIGIFORMES

Strigidae

Aegolius funereus

Asio flammeus

Bubo bubo

Glaucidium passerinum

Ketupa zeylonensis

Nyctea scandiaca

Strix nebulosa

Strix uralensis

Surnia ulula

CAPRIMULGIFORMES

Caprimulgidae

Caprimulgus europaeus

APODIFORMES

Apodidae

Apus caffer

CORACIIFORMES

Alcedinidae

Alcedo atthis

Halcyon smyrnensis

Coraciidae

Coracias garrulus

PICIFORMES

Picidae

Dendrocopos leucotos

Dendrocopos major canariensis

Dendrocopos major thanneri

Dendrocopos medius

Dendrocopos syriacus

Dryocopus martius

Picoides tridactylus

Picus canus

PASSERIFORMES

Alaudidae

Calandrella brachydactyla

Chersophilus duponti

Galerida theklae

Lullula arborea 2

Melanocorypha calandra

Melanocorypha yeltoniensis

Motacillidae

Anthus campestris

Laniidae

Lanius collurio

Lanius minor

Troglodytidae

Troglodytes troglodytes fridariensis

Muscicapidae

Turdinae

Luscinia svecica (Cyanosylvia svecica)

Oenanthe cypriaca (Oenenathe pleschanka cypriaca)

Oenanthe leucura

Saxicola dacotiae

Sylviinae

Acrocephalus melanopogon

Acrocephalus paludicola

Hippolais olivetorum

Sylvia nisoria

Sylvia rueppelli

Sylvia sarda

Sylvia undata

Muscicapinae

Ficedula albicollis

Ficedula parva

Ficedula semitorquata

Sittidae

Sitta krueperi

Sitta whiteheadi

Emberizidae

Emberiza caesia

Emberiza cineracea

Emberiza hortulana ²

Fringillidae

Bucanetes githagineus (Rhodopechys githaginea)

Fringilla coelebs ombrosa 2

Fringilla teydea

Loxia scotica

Pyrrhula murina ²

Corvidae

Pyrrhocorax pyrrhocorax

Reptiles

CHELONIA (TESTUDINES)

Testudinidae

Testudo graeca

Testudo hermanni

Testudo marginata

Cheloniidae

Caretta caretta

Chelonia mydas

Emydidae

Emys orbicularis

Mauremys caspica

Mauremys leprosa

Tryonychidae

Rafetus euphraticus

Tryonix triunguis

SAURIA

Lacertidae

Gallotia galloti insulanagae

Gallotia simonyi

Lacerta bonnali (Lacerta monticola)

Lacerta clarkorum

Lacerta monticola (Archaeolacerta monticola)

Lacerta schreiberi

Podarcis lilfordi

Podarcis pityusensis

Scincidae

Chalcides simonyi (Chalcides occidentalis)

Gekkonidae

Phyllodactylus europaeus

OPHIDIA (SERPENTES)

Colubridae

Coluber cypriensis

Elaphe quatuorlineata #

Elaphe situla #

Viperidae

Macrovipera schweizeri (Vipera lebetina schweizeri)

Vipera albizona

Vipera barani

Vipera kaznakovi

Vipera pontica

Vipera ursinii

Vipera wagneri

Amphibians/Amphibiens

CAUDATA

Salamandridae

Chioglossa lusitanica

Mertensiella luschani (Salamandra luschani)

Salamandra atra aurorae²

Salamandrina terdigitata

Triturus carnifex (Triturus cristatus carnifex)

Triturus cristatus (Triturus cristatus cristatus)#

Triturus dobrogicus (Triturus cristatus dobrogicus)

Triturus karelinii (Triturus cristatus karelinii)#

Triturus montandoni

Proteidae

Proteus anguinus

Plethodontidae

Hydromantes ambrosii (Speleomantes ambrosii)²

Hydromantes flavus (Speleomantes flavus)

Hydromantes genei (Speleomantes genei)

Hydromantes imperialis (Speleomantes imperialis)

Hydromantes strinatii (Speleomantes strinatii)²

Hydromantes supramontes (Speleomantes supramontes)

ANURA

Discoglossidae

Alytes muletensis

Bombina bombina#

Bombina variegata#

Discoglossus galganoi (incl. Discoglossus jeanneae)

Discoglossus montalentii

Discoglossus sardus

Neurergus crocatus

Neurergus strauchi

Ranidae

Rana holtzi

Rana latastei

Pelobatidae

Pelobates fuscus insubricus

Fish/Poissons

OSTEICHTHYES

PETROMYZONIFORMES

Petromyzonidae

Eudontomyzon spp. ² Lampetra fluviatilis ^{1, 2} # Lampetra planeri ^{1,2} #

Lethenteron zanandreai (Lampetra zanandreai)

Petromyzon marinus^{1, 2} #

ACIPENSERIFORMES

Acipenseridae

Acipenser naccarii

Acipenser sturio

SALMONIFORMES

Salmonidae

Hucho hucho (natural polulations/populations naturelles)²

Salmo macrostigma²

Salmo marmoratus

Salmo salar (only in freshwater/uniquement en eau douce) # 1,2

Coregonidae

Coregonus oxyrhynchus 1 #

CYPRINIFORMES

Cyprinidae

Alburnus albidus (Alburnus vulturius) ²

Anaecypris hispanica 2

Aspius aspius # 1, 2

Barbus capito

Barbus comiza 2 Barbus meridionalis² Barbus plebejus Chalcalburnus chalcoides 2 Chondrostoma genei

Chondrostoma lusitanicum² Chondrostoma polylepis 1,2

Chondrostoma soetta

Chondrostoma toxostoma $^{2}\,$

Gobio albipinnatus ² Gobio uranoscopus ²

Iberocypris palaciosi ² Ladigesocypris ghigii ²

Leuciscus lucumonis ² Leuciscus souffia ²

Phoxinellus spp. ² Rhodeus sericeus amarus # ²

Rutilus alburnoides 2 Rutilus arcasii 2

Rutilus frisii meidingeri $^2\,$ Rutilus lemmingii 2

Rutilus macrolepidotus²

Rutilus pigus 2 Rutilus rubilio ²

Scardinius graecus 2

Cobitidae

Cobitis taenia $^{1, 2}$ #

Cobitis trichonica 2 Misgurnus fossilis ²

Sabanejewia aurata ²

Sabanejewia larvata (Cobitis larvata et Cobitis conspersa) ²

SILURIFORMES

Siluridae

Silurus aristotelis²

ATHERINIFORMES

Cyprinodontidae

Aphanius iberus

Aphanius fasciatus

Valencia hispanica Valencia letourneuxi

SCORPAENIFORMES

Cottidae

Cottus gobio 1,2 #

Cottus petiti

PERCIFORMES

Percidae

Gymnocephalus schraetzer 2 Romanichthys valsanicola 2 (proposed for Appendix II/proposition pour l'Annexe II)

Zingel spp.

Gobiidae

Knipowitschia panizzae (Padogobius panizzae) ²

Padogobius nigricans

Pomatoschistus canestrini 2

CLUPEIFORMES

Clupeidae

Alosa spp. # ²

INVERTEBRATES/INVERTEBRES

Arthropods/Arthropodes

INSECTA

Mantodea

Apteromantis aptera

Odonata

Coenagrion hylas (Coenagrion freyi)

Coenagrion mercuriale

Cordulegaster trinacriae

Gomphus graslinii

Leucorrhinia pectoralis

Lindenia tetraphylla

Macromia splendens

Ophiogomphus cecilia

Oxygastra curtisii Orthoptera

Baetica ustulata

Coleoptera

Agathidium pulchellum

Boros schneideri

Buprestis splendens

Carabus menetriesi pacholei²

Carabus olympiae

Cerambyx cerdo

Corticaria planula 2

Cucujus cinnaberinus

Dytiscus latissimus

Graphoderus bilineatus

Limoniscus violaceus

Lucanus cervus²

Macroplea pubipennis²

Mesosa myops 2

Morimus funereus ²

Osmoderma eremita

Oxyporus mannerheimii ²

Pytho kolwensis

Rosalia alpina

Stephanopachys linearis ²

Stephanopachys substriatus²

Xyletinus tremulicola 2

Hemiptera

 $\hat{\text{Aradus}}$ angularis 2

Lepidoptera

Agriades glandon aquilo ²

Callimorpha (Euplagia, Panaxia) quadripunctaria # ²

Clossiana improba

Coenonympha oedippus

Erebia calcaria

Erebia christi

Erebia medusa polaris ²

Eriogaster catax

Euphydryas (Eurodryas, Hypodryas) aurinia

Graellsia isabellae ²

Hesperia comma catena ²

Hypodryas maturna

Lycaena dispar

Maculinea nausithous

Maculinea teleius

Melanargia arge

Papilio hospiton

Plebicula golgus

Xestia borealis ²

Xestia borealis ² Xestia brunneopicta ²

CRUSTACEA

Decapoda

Austropotamobius pallipes ²

ARACHNIDA

Pseudoscorpiones

Anthrenochernes stellae ²

Molluscs/Mollusques

GASTROPODA

Dyotocardia

Gibbula nivosa (Med.)

 ${\it Stylom matophora}$

Caseolus calculus

Caseolus commixta

Caseolus sphaerula

Discus guerinianus

Discula leacockiana

Discula tabellata Elona quimperiana Geomalacus maculosus Geomitra moniziana Helicopsis striata austriaca ² Idiomela (Helix) subplicata ² Leiostyla abbreviata Leiostyla cassida Leiostyla corneocostata Leiostyla gibba Leiostyla gibba Vertigo angustior ² Vertigo genesii ² Vertigo geyeri ² Vertigo moulinsiana ²

BIVALVIA

Unionoida

Margaritifera durrovensis (Margaritifera margaritifera) ² Margaritifera margaritifera ²

Unio crassus

Appendix 11

Ministerial Statement concerning the Pan-European Ecological Network (5th Ministerial Conference "Environment for Europe", Kviv, May 2003)

We, the European Ministers of Environment and Heads of Delegations of the States participating in the process of the Pan-European Biological and Landscape Diversity:

Consider that the Pan-European Ecological Network is a major means for implementing the aim of the Pan-European Biological and Landscape Strategy for the conservation and management of species, ecosystems, habitats, and landscapes;

Are convinced that the Pan-European Ecological Network has the potential to be used as a spatial planning tool for Europe;

Express our strong support to the development of the Pan-European Ecological Network and its establishment by 2015;

Engage ourselves to provide appropriate resources to the implementation of this major instrument;

Encourage financial institutions and mechanisms to prioritise green investments in relevant parts of the Pan-European Ecological Network and to avoid investments in these areas that will harm biological diversity and landscapes;

Welcome the maintenance or development of a sustainable relationship between agriculture and biological diversity in and around relevant parts of the Pan-European Ecological Network;

Welcome the indicative map of the Pan-European Ecological Network for Central and Eastern European region as a communication tool for promoting the establishment of the network in this region, and encourage the further extension of the map towards other regions in Europe;

Encourage:

- the States participating in the process of the Pan-European Biological and Landscape Diversity Strategy to give a priority to the development of the Network by supporting the programme of activity of the intergovernmental body (the Council of Europe) entrusted with it, developing national ecological networks comprising both areas of national and international importance and promoting programmes for the implementation of transboundary networks;
- the Central and Eastern Europe States and the Newly Independent States to give particular attention to the implementation of the Pan-European Ecological Network, in synergy with the Bern Convention Emerald Network and Natura 2000, as a way to protect their rich landscape and biological diversity and express the wish that enough resources be allocated to the relevant programmes;

Invite:

- the institutions and intergovernmental organisations engaged in the implementation of the Pan-European Ecological Network, in particular the Council of Europe and its Parliamentary Assembly and the European Centre for Nature Conservation (ECNC), to pursue and develop the work already undertaken;
- UNESCO to co-operate for the implementation of the Pan-European Ecological Network, in particular through its programme Man and Biosphere, Biosphere Reserves and World Heritage Sites;
- the Ministerial Conference on the Protection of Forests in Europe to co-operate in the implementation of the Pan-European Ecological Network;
- the European Conference of Ministers responsible for Regional Planning (CEMAT) to take into account the buildingup of the Pan-European Ecological Network and its integration in the priorities and programme of activities for regional and spatial development in Europe;
- the European Conference of Ministers responsible for Culture to take into account the protection of all aspects of landscapes with a view of maintaining their biological and landscape diversity, in co-operation with the national authorities responsible for the protection of natural environment and landscapes;
- the local and regional authorities to implement the Pan-European Ecological Network at their level and be closely involved in development of transnational networks, and involve all local stakeholders;
- the Committee of Ministers of the Council of Europe, the European Union, the Parliamentary Assembly of the Council of Europe, the Congress of Local and Regional Authorities of Europe of the Council of Europe, to contribute to the development of the Pan-European Ecological Network by providing appropriate resources to the programmes and activities to be implemented in this framework.

Appendix 12

Calendar for the implementation of the Emerald Network 2011-2020

Timing	Strategic issues	Phase I	Phase II	Phase III
2011-2012	 Update Res. 6 (1998) and Res. 4 (1996); Submission to the Standing	 Negotiation of a Pilot projects for Tunisia; Implementation of a second pilot project for Morocco; Feasibility analysis for a second pilot project in Turkey and/or possible planning for completion of Phase I; Negotiation of completion of Phase I in Bosnia-Herzegovina Completion of Phase I for Armenia, Azerbaijan, Georgia and Moldova through the ENP project by the end of 2011; Fulfilment of 80 % of Phase I for Ukraine; Fulfilment of at least 50 % of Phase I for Belarus and the European part of the Russian Federation; Completion of Phase I for Switzerland, Norway and Iceland; Negotiations for the identification of sites in the countries which have not been participating in the pilot project's programme: Andorra, Liechtenstein, Monaco, Kazakhstan (the European part). 	 Assessment of proposed Emerald sites in 6 West-Balkan countries: Albania, Bosnia-Herzegovina, Croatia, Montenegro, "the former Yugoslav Republic of Macedonia" and Serbia; gap analysis; Negotiation with West-Balkan countries concerning possible designation of new ASCIs; Start of assessment of proposed Emerald sites for Armenia, Azerbaijan, Georgia and Moldova (2012); Start pre-evaluation of the first set of proposed Emerald sites for countries asking for it (Switzerland, Norway,) 	
2013-2014	Finalisation of collection of background information on species and habitats	 Continuation of the pilot project in Tunisia; Completion of the Emerald Network in Morocco; Implementation of a full Emerald 	 Completion of the assessment of the proposed Emerald sites in Armenia, Azerbaijan, Moldova and Georgia Start of assessment of proposed sites in Belarus, the Russian Federation 	 Official designation of the Emerald Network in the West-Balkan Implementation of management, monitoring and reporting tools in the West-Balkan area.

2015-2016	of European interest. • Drafting and adoption of monitoring tools and management plans, based on international guidelines; setting-up of a coherent Pan-European Ecological Network; • Continuation of drafting and implementing	project in Turkey; Completion of Phase I for Belarus, the European part of the Russian Federation and Ukraine; Development of principles of the establishment of the Emerald Network (as Core Areas of the PEEN) in Asian parts of the Russian Federation and Kazakhstan, in Kirghizistan, Tadjikistan, Turkmenistan, Uzbekistan (further activities in this field of actions will be planned if appropriate)	 and Ukraine in coordination with the evaluation for sites in Moldova and South Caucasus, if appropriate; Assessment of proposed Emerald sites in Switzerland, Iceland and Norway. Assessment of proposed Emerald sites in other countries according to achievements in Phase I (Andorra, Liechtenstein, Monaco, Kazakhstan (the European part)) Finalisation of the evaluation of proposed Emerald sites in Belarus, the Russian Federation and Ukraine 	 Designation of the Emerald Network in Moldova and South Caucasus; Start designation of Emerald sites in
	management plans and monitoring for designated ASCI's.		Assessment of proposed Emerald sites in participating African countries	Belarus, the Russian Federation and Ukraine; Designation of the Emerald Network in Norway, Iceland and Switzerland; Re-assessment of all agreed Emerald sites according to new knowledge. Designation of the Emerald Network in other countries according to achievements in Phase II (Andorra, Liechtenstein, Monaco, Kazakhstan (the European part))
2017-2019				 Publication of the lists of the Emerald Network of areas of special conservation interest; Finalise the designation of Emerald sites in the whole Pan-European area, as well as in participating African countries; Full assessment of the Pan-European Emerald Network in view of the long-term survival of the species and

	habitats of European concern; • Assessment of the adequacy of the Bern Convention's Appendices and
	Resolution n° 4 and n° 6
2020	• The Emerald Network of Areas of Special Conservation Interest is fully operational to guarantee the long-term survival of all species and habitats of European Interest, including appropriate management, monitoring and reporting tools, compatible with NATURA2000
	Procedures for continuous updating of the data and evaluation of the long-term survival of the species and habitats have been put in place

Implementation of Recommendation 16 of the Bern Convention

EMERALD NETWORK

STANDARD DATA-ENTRY FORM

FOR AREAS OF SPECIAL CONSERVATION INTEREST (ASCI's)

As amended from the NATURA 2000 standard data-entry form

1. SITE IDENTIFICATION 1.4. UPDATE 1.1. **TYPE** 1.2. SITE CODE 1.3. COMPILATION DATE 1.5. RELATION WITH OTHER EMERALD SITES: EMERALD SITE CODES EMERALD SITE CODES 1.6. RESPONDENT(S): 1.7. SITE NAME: 1.8. SITE INDICATION AND DESIGNATION DATE: DATE SITE PROPOSED AS EMERALD SITE: DATE CONFIRMED AS EMERALD SITE YYYY

2.SITE LOCATION

2.1. SITE CENTRE LOCATION: LONGITUDE W/E (Greenwich)	LATITUDE	
2.2. AREA (ha):	2.3. SITE LENGTH	I (Km):
2.4. ALTITUDE (m): MINIMUM	MAXIMUM	MEAN
2.5. ADMINISTRATIVE REGION: CODE (Appendix A)	REGION NAME	%COVER
(Appendix A)		
Mar	ine area not covered by a	NUTS-region
2.6. BIOGEOGRAPHIC REGION:		
Anatolian Arctic	Alpine Atlantic	Boreal Continent
Macaronesia Mediterranean	Pannonic Black Sea	Steppic

3. ECOLOGICAL INFORMATION

3.1. HABITAT types present on the site and site assessment for them:

3.1.a. HABITAT TYPES AS FROM RESOLUTION No 4 (1996):

CODE	%COVER	REPR	ESE	NTAT	TVITY	•	RE	LATI	VE	C			ATIO	N	Gl	LOB	AL
(Resolution No 4)						_	SU	RFA(CE	_	S	ΤΑΤ	JS	A	SSE	SSN	<u>MEN</u> T
		Α	В	С	D	Ī	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D		Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D		Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
		Α	В	С	D	1	Α	В	С		Α	В	С		Α	В	С
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3.1.b. HABITAT RECORDING FOR SURFACES COVERED BY OTHER IMPORTANT HABITAT TYPES:

(Palaearo		COD abita	ıssifi	catio	n)	%C	OVE	ER
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3.2. SPECIES

Covered by Resolution No 6 (1998)

and

site assessment for them:

3.2.a. BIRDS listed on Resolution No 6 (1998)

CODE	NAME	POI	POPULATION RESIDENT MIGRATORY						SITE ASSES	SMENT	
		RESIDENT	M	IGRATOR	Y		Popu	ılation	Conservation	Isolation	Global
		В	reed	Winter	Stage	1					
							A I	B C D	A B C	A B C	A B C
							A I	3 C D	A B C	A B C	A B C
							A I	3 C D	A B C	A B C	A B C
							A I	B C D	A B C	A B C	A B C
							A I	B C D	A B C	A B C	A B C
							A I	B C D	A B C	A B C	A B C
							A I	B C D	A B C	A B C	A B C
							A I	C D	A B C	A B C	A B C
							A I		A B C	A B C	A B C
							A I		A B C	A B C	A B C
							A I		A B C	A B C	A B C
							A I		A B C	A B C	A B C
							A I		A B C	A B C	A B C
							A I		A B C	A B C	A B C
							A I		A B C	A B C	A B C
							A I		A B C	A B C	A B C
							A I		A B C	A B C	A B C
							A I		A B C	A B C	A B C
							A I	B C D	A B C	A B C	A B C
									Please c	opy page if	necessary

3.2.b. Regularly occurring Migratory Birds not listed on Resolution No 6 (1998)

CODE	NAME	PO	POPULATION RESIDENT MIGRATORY						SITE ASSI	ESSMENT	
		RESIDENT	N	IIGRATOR	Y		Popul	ation	Conservation	Isolation	Global
			Breed	Winter	Stage						
						Ī	A B	C D	A B C	A B C	A B C
						ĺ	A B	C D	A B C	A B C	A B C
						Î	A B	C D	A B C	A B C	A B C
						ĺ	A B	C D	A B C	A B C	A B C
						ĺ	A B	C D	A B C	A B C	A B C
						ĺ	A B	C D	A B C	A B C	A B C
						ĺ	A B	C D	A B C	A B C	A B C
						ĺ	A B	C D	A B C	A B C	A B C
						İ	A B	C D	A B C	A B C	A B C
						l	A B	C D	A B C	A B C	A B C
						l	A B	C D	A B C	A B C	A B C
						İ	A B	C D	A B C	A B C	A B C
						ĺ	A B	C D	A B C	A B C	A B C
						l	A B	C D	A B C	A B C	A B C
						İ	A B	C D	A B C	A B C	A B C
						lÎ	A B	C D	A B C	A B C	A B C
							A B	C D	A B C	A B C	A B C
							A B	C D	A B C	A B C	A B C
							A B	C D	A B C	A B C	A B C
				•				***************************************	Please o	copy page if	necessary

3.2.c. MAMMALS listed on Resolution No 6 (1998)

CODE	NAME	POPULATION RESIDENT MIGRATORY							SITE ASSI	ESSN	1EN1	Γ		
		RESIDENT	M	/IGRATOR	Y		Popula	ation	Conservation	Iso	lation		Glo	bal
			Repro- duction	Winter	Stage									
						Ī	A B	C D	A B C	A	ВС		A	ВС
							A B	C D	A B C	A	ВС	1	A	ВС
							A B	C D	A B C	A	ВС	1	A	ВС
							A B	C D	A B C	A	ВС	7	A	ВС
							A B	C D	A B C	A	ВС	7	A	ВС
							A B	C D	A B C	A	ВС	7	A	ВС
							A B	C D	A B C	A	ВС		A	ВС
							A B	C D	A B C	A	ВС	1	Α	B C
							A B	C D	A B C	A	ВС	7	A	ВС
							A B	C D	A B C	A	ВС	7	A	ВС
							A B	C D	A B C	A	ВС	1	A	ВС
							A B	C D	A B C	A	ВС	7	A	ВС
							A B	C D	A B C	A	ВС	7	A	ВС
							A B	C D	A B C	A	ВС	1	A	ВС
							A B	C D	A B C	A	ВС	7	A	ВС
						I	A B	C D	A B C	A	ВС	7	A	ВС
							A B	C D	A B C	A	ВС	-	A	ВС
							A B	C D	A B C	A	ВС		Α	ВС
							A B	C D	A B C	A	ВС	3	A	ВС
									Please c	ору ј	page	if ne	ces	sary

3.2.d. AMPHIBIANS AND REPTILES listed on Resolution No 6 (1998)

CODE	NAME	RESIDENT	POPUL	ATION IIGRATOR	Y	1	Po	pula	tion			E AS			1EN latic			Glo	bal	
			Repro- duction	Winter	Stage					_										
							A	В	CD		Α	В	7	Α	В	C		A	В	C
							Α	В	CD		Α	В	7	Α	В	C		Α	В	C
							Α	В	CD	•	Α	В	7	Α	В	C		Α	В	C
							Α	В	C D		A	В	7	Α	В	С		Α	В	С
							Α	В	C D		Α	В	3	Α	В	C		Α	В	С
							Α	В	C D	•	Α	В	7	Α	В	С		Α	В	С
						1	Α	В	C D		A	В	7	Α	В	C		Α	В	C
							Α	В	C D		Α	В	3	Α	В	C		Α	В	С
							Α	В	C D	•	Α	В	7	Α	В	С		Α	В	С
							Α	В	C D		Α	В	7	Α	В	С		Α	В	С
							Α	В	C D		Α	В	3	Α	В	C		Α	В	С
							Α	В	C D		Α	В	3	Α	В	C		Α	В	С
							Α	В	C D	•	Α	В	7	Α	В	С		Α	В	С
							Α	В	C D		Α	В	7	Α	В	С		Α	В	С
							Α	В	C D		Α	В	3	Α	В	C		Α	В	С
							Α	В	C D		A	В	7	Α	В	C		Α	В	C
							Α	В	C D	•	Α	В	7	Α	В	С		Α	В	С
							Α	В	C D		Α	В	7	Α	В	С		Α	В	С
						1 1	A	В	C D		A	В	7	Α	В	С		Α	В	С
<u> </u>	•				1			-		-	P	leas	e co	рур	oag	e ij	f ne	ces	sar	y

3.2.e. FISHES listed on Resolution No 6 (1998)

CODE	NAME		POPULATION RESIDENT MIGRATORY						;	SITE ASSESSME						MENT				
		RESIDENT	N	IIGRATOR	Y		Pop	pula	ion	C	onse	ervat	on	Isc	latio	on		Glo	bal	
			Repro- duction	Winter	Stage	_														
							A	В	C		Α	В	C	Α	В	C	Γ	A	В	C
							A	В	C		Α	В	С	Α	В	C		A	В	C
							Α	В	CD		Α	В	C	A	В	C		A	В	C
							A	В	C D		Α	В	C	A	В	C		A	В	C
							A	В	C D		Α	В	C	A	В	C		A	В	C
							A	В	C D		Α	В	C	Α	В	C	L	A	В	C
							A	В	C D		Α	В	C	Α	В	C	L	A	В	C
									C D		Α	В	C	Α		C			В	C
							A	В	C D		Α	В	C	Α	В	C	L		В	C
							A	В	C		Α	В	C	A	В	C	L	A	В	C
							A	В	C D		Α	В	C	Α	В	C	L	A	В	C
							A	В	C D		Α	В	C	Α	В	C	L	A	В	C
							A	В	C D		Α	В	C	Α	В	C	L	A	В	C
							A	В	C D		Α	В	C	Α	В	C	L	A	В	C
						L	A	В	C D		Α	В	C	Α	В	C	L	A	В	C
							A	В	C		Α	В	C	Α	В	C		A	В	C
							A	В	C D		Α	В	C	Α	В	С		A	В	C
							A	В	CD		Α	В	C	A	В	C		A	В	C
							A	В	C	1	Α	В	C	Α	В	C		A	В	C
											I	Plea	se c	ору	pag	e if	nec	cess	sar	y

3.2.f. INVERTEBRATES listed on Resolution No 6 (1998)

CO	DE	NAME		POPUL	ATION		_	;	SITE ASSES	SMENT	
			RESIDENT	M	IIGRATOR	Y		Population	Conservation	Isolation	Global
			_	Repro- duction	Winter	Stage					
								A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
								A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
								A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
			1					A B C D	A B C	A B C	A B C
							1	A B C D	A B C	A B C	A B C
								A B C D	A B C	A B C	A B C

Please copy page if necessary

3.2.g. PLANTS listed on Resolution No 6 (1998)

CODE	NAME	POPULATION		SITE ASSES	SMENT	
			Population	Conservation	Isolation	Global
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
						-
						A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C
			A B C D	A B C	A B C	A B C

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3.3. Other Important Species of Flora and Fauna

GROUP B M A R F I P	SCIENTIFIC NAME	POPULATION	MOTIVATION
			A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D
			A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D
			A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D
			A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D
			A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D A B C D
			A B C D A B C D A B C D

(B = Birds, M = Mammals, A = Amphibians, R = Reptiles, F = Fishes, I = Invertebrates, P = Plants)

Please copy page if necessary

4. SITE DESCRIPTION

4.1. GENERAL SITE CHARACTER:

Habitat classes	% cover
Marine areas, Sea inlets	
Tidal rivers, Estuaries, Mud flats, Sand flats, Lagoons (including saltwork basins)	
Salt Marshes, Salt pastures, Salt Steppes	
Coastal sand dunes, Sand beaches, Machair	
Shingle, Sea cliffs, Islets	
Inland water bodies (Standing water, Running water)	
Bogs, Marshes, Water fringed vegetation, Fens	
Heath, Scrub, Maquis and Garrigue, Phrygana	
Dry grassland, Steppes	
Humid grassland, Mesophile grassland	
Alpine and sub-Alpine grassland	
Extensive cereal cultures (including Rotation cultures with regular fallowing)	
Ricefields	
Improved grassla,nd	
Other arable land	
Broad-leaved deciduous woodland	
Coniferous woodland	
Broad-leaved evergreen woodland Mixed woodland	
Artificial forest monoculture (e.g. Plantations of poplar or Exotic trees) Non-forest areas cultivated with woody plants (including Orchards, groves, Vineyards, Dehesas)	
Inland rocks, Screes, Sands, Permanent Snow and Ice	
Other land (including Towns, Villages, Roads, Waste places, Mines, Industrial sites	
TOTAL HABITAT COVER	100 %
TOTAL HABITAT COVER	100 76
I.2. QUALITY AND IMPORTANCE:	
I.3. VULNERABILITY:	
HO, YULNERADILII I;	

4.4. SITE DESIGNATI	ON (remarks concerning quantitative data below	ow):
4.5. OWNERSHIP:		
4.6 DOCUMENTATIO	ONI.	
4.6. DOCUMENTATION	JN:	
4.7. HISTORY:		
Date	Field Changed	Description
		7

5. SITE PROTECTION STATUS AND RELATION WITH CORINE Biotopes:

5.1. DESIGNATION TYPES at I	ational and Sub-national level:	
CODE %COVER	CODE %COVER CO	DE %COVER
5.2. RELATION OF THE DESC	RIBED SITE WITH OTHER SITES:	
Designated at National or Sub-na	ional level:	
TYPE CODE	SITE NAME	OVERLAP TYPE %COVER
Designated at the International le		
ТҮРЕ	NAME of the Site	OVERLAP T <u>YPE</u> %COVER
RAMSAR CONVENTION: BIOGENETIC RESERVE:	1 2 3 4 1 2 2 3 3 4 3 5 6 7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
EURODIPLOMA SITE: BIOSPHERE RESERVE:	-	1
BARCELONA CONVENTION: HELSINKI CONVENTION: WORLD HERITAGE SITE:	-	
OTHER:	- [
5.3. RELATION OF THE DESC	OVERLAP CORINE SITE CODE TYPE %COVER	OVERLAP TYPE %COVER
		1

6. HUMAN ACTIVITIES IN AND AROUND THE SITE

6.1. GENERAL IMPACTS AND ACTIVITIES AND PROPORTION OF THE SURFACE AREA OF THE SITE

AFFECTED:						
IMPACTS AND ACTIVIT	TIES WITHI	N THE SITE:				
CODE INTENSITY	% OF SITE	INFLUENCE + 0 - + 0 - + 0 - + 0 - + 0 - + 0 - + 0 - + 0 -	CODE	INTENSITY A B C A B C A B C A B C A B C A B C A B C A B C	% OF SITE	INFLUENCE + 0 - + 0 - + 0 - + 0 - + 0 - + 0 - + 0 -
CODE INTENSITY		INFLUENCE + 0 - + 0 - + 0 - + 0 - + 0 - + 0 - + 0 -	CODE	INTENSITY A B C A B C A B C A B C A B C A B C A B C A B C		INFLUENCE
6.2. SITE MANAGEMEN	Т:					
BODY RESPONSABLE FO	OR THE SITE	MANAGEMENT:				

AND	AND PL							

7. MAP OF THE SITE

• Physical r	nap:			
NATIONAL N	MAP NUMBER	SCALE	PROJEC	CTION
REFERENCE	TO AVAIL ARILITY O	F BOUNDARIES IN DIGITISED	FORM	
KEI EKEIVEE	TO A VAILABILITY O	DOUNDAMES IN DIGITISED	OKW	
• Map of de	esignated sites describe	d in 5:		
Provide this in	formation on a map with	the same characteristics as above!		
• Aerial ph	otograph(s) included:	_		
		NEG NO		
		YES NO		
NUMBER	LOCATION	SUBJECT	COPYRIGHT	DATE
			 	
			1	
		J		
		8. SLIDES		
NUMBER	LOCATION	SUBJECT	COPYRIGHT	DATE
	Boermen			
			 	
		1	1	
\vdash		 	┨ ├─────	
			4	

Appendix 14

Criteria for assessing the National Lists of proposed Areas of Special Conservation Interest (ASCIs) at biogeographical level and procedure for examining and approving Emerald Candidates sites

1. Background

The creation of the Emerald Network of areas of special conservation interest was agreed by the Standing Committee of the Bern Convention in 1989, through the adoption of Recommendation No.16 (1989) on the Areas of Special Conservation Interest (ACSI). The Recommendation advocates Contracting Parties to take, either by legislation or otherwise, steps to designate areas of special conservation interest to ensure that necessary and appropriate conservation measures are taken for each area situated within their territory or under their responsibility.

Article 4 of the Bern Convention is the most relevant article, as it states that Contracting Parties "shall take appropriate and necessary legislative and administrative measures to ensure the conservation of the habitats of the wild flora and fauna species, especially those specified in Appendices I and II, and the conservation of endangered natural habitats".

Nonetheless, the real implementation of the Emerald Network only started in 1998, through the adoption by the Standing Committee of Resolution No 3 (1996) concerning the setting up of a pan-European Ecological Network, and Resolution No 5(1998), concerning the rules for the Network of Areas of Special Conservation Interest (Emerald Network).

Resolution No. 3 (1996) encourages "Contracting Parties and observer states to designate ASCIs", thus inviting all the European Union states, European states which are not members of the European Union and some African states to join the Emerald Network. Participation in the Emerald Network is therefore optional, as Contracting Parties and Observers States benefit from the "soft law" approach characteristic of Council of Europe recommendations and resolutions. However, it is important to note that the obligations on the Contracting Parties to protect natural habitats are rigorous requirements clearly set out in the Convention and forming part of binding international law.

The European Union, as such, is a Contracting Party to the Bern Convention. Implementation of the Bern Convention by EU member states is achieved mainly through full compliance with the Habitats and Birds Directives and the requirements of the Bern Convention with regard to habitats are met by designating sites for the Natura 2000 Network. According to Resolution No. 5 (1998) of the Bern Convention Standing Committee on rules applying to the network of Areas of Special Conservation Interest, "for Contracting Parties which are Member States of the European Union, Emerald Network sites are those of the Natura 2000". The provisions of the Birds and Habitats Directives are thus the only procedures that apply to these countries. As indicated both in the EU Habitats Directive and in the Bern Convention, the ultimate goal for the creation of such a sites network is the "long term survival and maintenance of a favourable conservation status of the species and habitats of European Interest".

In order to ensure a full complementarity and consistency between the EU Natura 2000 and the Emerald networks, the Group of Experts on Protected Areas and Ecological Networks (GoEPAEN) recommended that any evaluation of the proposed Emerald sites should be based on the same rules and procedures as developed for Natura 2000, i.e using a biogeographic approach. At the same time, in full recognition of the resources and time needed to implement such a process, the GoEPAEN called for a simplified approach without loosing the essence of the evaluation.

In 2006, a first attempt was made to agree criteria for a simplified biogeographic approach to the evaluation of Emerald sites as described in document T-PVS/Emerald (2007) 03, on the basis of the criteria adopted by the Habitats Committee in 1997 (Hab. 97/2 rev. 4 18/11/97). Meanwhile, the EU accumulated experience within the different Biogeographical seminars and the procedure was gradually amended accordingly. The present paper aims at revising document T-PVS/Emerald (2007) 03, taking into account recent developments in the implementation of the Natura 2000 network and proposing a process to be applied in the preparation of the Pan-European list of ASCIs under the Bern Convention. It is relevant to the implementation of phases II and III of the Emerald process as described in T-PVS/Emerald (2010)5.

Although the constitution of Emerald Network is still ongoing, three different stages or "Phases" of implementation can be identified:

<u>Phase I</u>: Participating countries assess their natural resources and identify species and habitats to be protected according to the relevant resolutions of the Bern Convention. They subsequently select potential sites which are suitable for ensuring the long-term survival of the "Emerald" species and habitats, and they send a database containing scientific information on the proposed sites to the Bern Convention's Secretariat.

<u>Phase II</u>: An evaluation of the efficiency of the proposed sites which has to be done on a species by species and habitat by habitat base. Ideally the evaluation would only start if a complete inventory of proposed sites exists for a

certain area. Realistically, this would mean that over 80 % of the finally proposed sites would already be available for the evaluation. This exercise is to be conducted in cooperation with the European Environment Agency.

Once the scientific value of the proposed sites is assessed, the candidate sites will be submitted to the Standing Committee and will eventually be approved so to formally integrate the Emerald Network. For EU member states an approved Natura 2000 Network of sites will automatically fulfil the parties' obligations towards the Bern Convention and the Emerald Network.

<u>Phase III</u>: National designation of the adopted ASCI's and implementation of management, reporting and monitoring measures, under the responsibility of national authorities.

Sites proposed as Emerald sites by individual countries will be eligible to become ASCIs only if they contribute to the conservation of habitat types listed in Recommendation 4 and species listed in Recommendation 6 of the Bern Convention and endorsed by the Standing Committee of the Convention.

ASCI selection is guided by Recommendation 16, paragraph 1, which describes six general conditions; all ASCIs should fulfil at least one:

- a) It contributes substantially to the survival of threatened species, endemic species, or any species listed in Appendices I and II of the convention;
- b) It supports significant numbers of species in an area of high species diversity or supports important populations of one or more species;
- c) It contains an important and/or representative sample of endangered habitat types;
- d) It contains an outstanding example of a particular habitat type or a mosaic of different habitat types;
- e) It represents an important area for one or more migratory species;
- f) It otherwise contributes substantially to the achievement of the objectives of the convention;

Following the principles described in Annex III of the Habitats Directive for setting up Natura 2000 sites under that Directive, two distinct stages in the setting up of the Emerald network can be identified:

- 1) An evaluation of the sufficiency of proposed ASCIs species by species and habitat by habitat (equivalent to Annex III, stage 1 of the Habitats Directive); see section 2;
- 2) An evaluation of the proposed ASCIs site by site at the bio-geographical level (equivalent to Annex III, stage 2 of the Habitats Directive), followed by approval by the GoEPAEN and subsequently adoption at the Standing Committee of the Bern Convention; see section 3.

The Areas of Special Conservation Interest – like the Natura 2000 sites – are regarded as core areas for the Pan-European Ecological Network (PEEN). As such, they represent key components of the Pan-European Network. The introduction of a vast natural infrastructure, of the kind ultimately envisaged by the Pan-European Ecological Network, will make the areas identified for the Emerald Network even more important and will focus attention on their possible linkage with other protected areas. The state of ecological connectivity of a concerned ASCI with other natural areas should be taken into account when assessing its compliances to the criteria of the Recommendation No. 16 (1989). A degree of policy convergence between the various networks concerned (PEEN, Natura 2000 and Emerald) should therefore be encouraged.

2. Evaluation of sufficiency of proposed ASCIs for species and habitats

2.1 Overall description of the procedure

The evaluation of Emerald databases at a national level should be viewed as a cycle consisting of the following steps:

- (1) Submission of proposals in the form of a database by the National Authorities to the Bern Convention Secretariat, using the Common Data Repository of the European Environment Agency;
- (2) Quality check of the database by the Council of Europe Secretariat, followed by correction of incompleteness and errors by parties;
- (3) Nomination as official candidate sites by the Bern Convention Standing Committee
- (4) Preliminary evaluation by EEA-ETC/BD of sufficiency of the proposed list of ASCIs (feature/ country/ biogeographical region);
- (5) Scientific discussion at the regional bio-geographical seminar and assessments of sufficiency,
- (6) If necessary, proposal of additional Emerald Sites and updating the database by national authorities;
- (7) Submission of revised database;

- (8) Submission of the final sitelist to the GoEPAEN for discussion:
- (9) Submission to the Bern Convention Standing Committee for adoption.

The construction of the Emerald databases at a national level should be viewed as a cycle consisting of the first seven steps of the overall procedure.

Evaluation of the Emerald network is viewed as an iterative process. Conclusions on the sufficiency of national ASCI proposals will result in the need for new proposed Emerald sites or extension of existing sites if the conclusions are found unsatisfactory. An increase in site numbers with time is expected due to improving scientific knowledge and changes in nature. In all cases, re-submitted ASCI proposals will be re-evaluated providing updated conclusions.

2.2 Emerald database submission, completeness and quality

Databases should be uploaded to the appropriate folder in the EEA data centre together with an official letter by national authorities noting the delivery of an official database. Second and subsequent deliveries should also include a description of the changes between versions.

Emerald databases should be prepared according to the instructions given in the Emerald Software User Manual (T-PVS/Emerald (2003) 2). Complete databases are essential and for the evaluation process including discussions at the bio-geographical seminars. All species of Resolution 6 and Habitats of Resolution 4 regularly present on a site should be listed and all relevant data-fields completed. Quantitative data on species populations and habitat cover areas at sites should be provided whenever possible. However, species which have been recorded occasionally but which are not regularly occurring (e.g. vagrants) should not be included. It is difficult to give a general rule on listing species for which only historical records exist, for many small, poorly known species, even old records may still be valid (e.g. for bryophytes or small molluscs such as *Vertigo* spp.) unless recent survey shows the species is no longer present or if the habitat has changed and is no longer suitable.

Before evaluation for network sufficiency, submitted databases and associated spatial data will be checked for completeness and quality. After country authorities have received an assessment of database quality, identified gaps and errors should be corrected as quickly as possible and the updated database should be uploaded again to the Common Data Repository of the EEA.

2.3 Preliminary evaluation

Preliminary evaluation of sufficiency of national ASCI proposals will be essentially a scientific preparation for the discussions at the bio-geographical seminar. It will be carried out by an independent scientific institution (EEA – ETC/BD). Preliminary evaluation will examine the latest submitted database by the party (but not later than 90 days before the planned bio-geographical seminar) and take into account relevant available scientific information.

Establishment of the Reference lists of species and habitats

Prior to evaluation, a preliminary Reference List of species and habitats of Bern Convention Resolution (1996) No 4 and Resolution (1998) No 6 regularly present in each country per bio-geographical region will be prepared based on current scientific information, in order to show for which features which country is obliged to designate ASCIs. The reference lists should not be considered as checklists of species and habitats occurring in the countries and respective regions, thus they should exclude vagrant or accidental species. An 'X' in the list will mean that countries have an obligation to designate sites for that species or a habitat in a particular bio-geographical region. A question mark (?) will indicate that the status of the species or habitat is not clear and additional research is needed to clarify it's status.

Evaluation of sufficiency

The contribution towards favourable conservation status for a given species or habitat type through the designation of a given list of ASCIs will not only depend on the intrinsic quality of those sites, but also on the intensity of the current or proposed conservation measures for each habitat or species including actions outside designated areas. The assessment must be based on the intrinsic value of the proposed sites for each species and habitat type, taking into account their potential contribution to the defined conservation goal, i.e. maintaining or restoring the species and habitats to Favourable Conservation Status".

It is clear that the factors relevant to the assessment of network sufficiency for each species and habitat type will vary greatly from case to case, depending on different factors. In general, there should be a <u>proportionate response</u> by the parties, so that for the rarest habitats and species of European interest there will be a high proportion of the resource included within the Emerald Network, while for those which are more abundant there will be a lower proportion of the resource within the Network.

It would not be realistic to try to establish one single quantitative criterion equally valid for all habitats and species in all situations. The expected assessment of site lists for the bio-geographical region must be based on a case-by-case (feature/country/biogeographical region) discussion, taking into account additional information on different parameters related to each species and habitat type.

Requirements to be met

Four requirements can be expected to be met by a representative list of sites to be considered as sufficient to enable a favourable conservation status for a given species or habitat type at bio-geographical level:

- 1) it should represent sites from the entire distribution range of every Emerald species and habitat at a national level and bio-geographical level if a party shares more than one region;
- 2) it should reflect the ecological variation of the habitat and of the species (genetic) within the bio-geographical region. In case of species, site proposals must include the whole range of habitats that are needed for the different stages of its life-cycle such as reproduction, migrations, foraging (etc.)
- 3) it should be well-adapted to the specific conservation needs, in particular to those related to the distribution patterns (endemicity, degree of isolation/fragmentation, historical trends, climate change) and to the human pressures, threats and vulnerability of the considered species or habitat type;
- 4) if the first 3 conditions are met it will be expected that site proposals will include significant proportions of habitat area and species populations within the Emerald network versus the overall national resource.

00utcomes of the evaluation and Preparation of draft list of Emerald sites

A draft list of candidate ASCIs per biogeographical region within the region of concern at the seminar (West-Balkan, Caucasus, etc ...) will be prepared using the data from the respective Emerald databases and according to the table structure shown in the Table 1. Parties will be requested to check information in these lists so to be ready for the final approval at the bio-geographical seminar.

Table 1. Contents of the "Draft List of Proposed Emerald Sites"

Column count	Description
A	ASCI code comprising nine characters, the first two being the ISO code for the Member
	State
В	ASCI name
С	Surface area of ASCI (ha)
D	Centroid coordinates of ASCI (latitude and longitude)
Е	Number of species of Resolution 6 at the ASCI
F	Number of habitat types of Resolution 4 at the ASCI

The results of the preliminary evaluation will be: (1) draft Reference Lists for species and habitats; (2) draft Detailed Conclusions and (3) draft lists of proposed Emerald sites. These documents will form the basis of discussions at the bio-geographical seminar.

The evaluation of the Emerald site proposals will also include bird species using the same methodology as for other species, contrary to the Natura 2000 bio-geographical seminars which only consider species covered by the Habitats Directive.

More detailed guidelines for site selection and proposal evaluation for certain taxonomic groups (e.g., birds, fish) or environments (e.g., marine) may have to be further developed when parties involved in the Emerald phase II gain more experience.

2.4 Regional Bio-geographical seminar

Regional bio-geographical seminars will be organised involving all parties represented in a region (e.g. West-Balkan, South Caucasus, etc), provided that they all have submitted Emerald databases of sufficient quality to enable evaluation of sufficiency as described above. The seminars will discuss (1) reference lists; (2) the sufficiency of each species and habitat, according to the agreed reference lists and (3) suitability of sites for inclusion in the final list of ASCIs.

Each seminar will include participants from the Bern Convention Secretariat, the ETC/BD, the Bern Convention parties, independent experts chosen by the Council of Europe and the ETC/BD, an agreed number of representatives of relevant NGOs and observers from the neighbouring countries.

The seminar will be organised as a discussion forum among the stakeholders described above where each species and habitat will be assessed per party and bio-geographical region, according to the agreed Reference List. The discussions will result in an agreed conclusion (see categories in Table 2) on sufficiency/insufficiency of site proposals for each individual species and habitats present in the countries. Sites which do not host any species of Resolution (1996) No 4 or habitats of Resolution (1998) No 6 will be discussed to assess their suitability for designation as ASCI, referring to the general conditions for site selection described in Recommendation 16. Final detailed conclusions of the seminar, together with the revised Reference Lists and lists of approved sites, will be published on the Council of Europe's Emerald website.

At the later stages of the Emerald network building, after the bio-geographical seminar(s), further assessments may be required due to additional site proposals or modifications of existing sites and bi-lateral meetings may be called between an individual Bern Convention party and Bern Convention secretariat (involving also ETC/BD as an independent jury) to follow the site designation progress in a concerned party.

2.5 Actions after the seminar

Final Detailed Conclusions will guide parties on what actions they should undertake in order to improve the Emerald network at national and bio-geographical level. Table 2 shows the type and categories of conclusions that will be used during the seminar and actions that will be required from the parties after the seminar.

Together with dissemination of Final Detailed Conclusions, the Group of Experts on Protected Areas and Ecological Networks and the Bern Convention Secretariat will agree on the date by when parties will be expected to deliver requested amendments and additions to site proposals.

Evaluation of site proposals will be an iterative process and further work will be required as a result of additional site proposals arising from seminar conclusions and/or changes due to improving scientific knowledge.

Table 2. Conclusions and their abbreviations used in bio-geographical seminars. Codes can be combined, for example 'IN MOD and CD' would indicate that additional sites are required and that the existing proposals need correcting or completing.

Code	Meaning	Action required
SUF	Sufficient	No further sites needed
IN MAJOR	Insufficient major	No sites proposed at present. A major effort to designate sites is needed.
IN MOD	Insufficient moderate	One or a number of additional sites (or maybe extension to sites) required. IN MOD GEO means that additional site(s) are required in certain region to eliminate geographical gap.
IN MIN	Insufficient minor	No additional sites required but habitat/species should be noted on sites already proposed for other habitats/species
CD	Correction of data	Data needs to be corrected / completed / deleted
Sci Res	Scientific reserve	A definite conclusion is not possible: need to investigate/clarify a scientific issue – interpretation of habitat, controversial presence of species, etc.

3. Approval and adoption of sites at the bio-geographical level

Once the iterative process of the evaluation of the Emerald candidate sites has reached a sufficient level of agreement, the last two steps of the overall procedure are undertaken:

- (8) Submission of the final database sitelist to GoEPAEN for discussion;
- (9) Submission of the sitelist to the Bern Convention Standing Committee for adoption.

The Group of Experts on Protected Areas and Ecological Networks receives the final database of official candidate sites for discussion. The GoEPAEN will then forward the final list to the Standing Committee of the Bern Convention for adoption. This final list will be published using the format as described above (Table 1).

Published EU Community Lists of NATURA 2000 sites are available as examples at: http://eur-lex.europa.eu/LexUriServ/LexUriServ/do?uri=OJ:L:2010:030:0001:0042:EN:PDF

Figure 1. Schematic description of the Emerald network evaluation cycle: from database submission to approval of ASCIs.

