

# **Criteria for Biosphere Reserves in Austria**

The first edition of the criteria for biosphere reserves in Austria was developed with the help of many experts and endorsed on 7 March 2006 by the Austrian National Committee for the UNESCO Man and the Biosphere Programme (MAB). In doing so Austria made an important contribution to international efforts to safeguard the quality of the World Network of Biosphere Reserves. In the meantime, ongoing revision of the MAB Programme by UNESCO has necessitated a revision of these criteria.

In 1995 the *Seville Strategy*, in conjunction with the Statutory Framework of the World Network of Biosphere Reserves, greatly modernized the concept of UNESCO biosphere reserves. It provided the first framework for the World Network of Biosphere Reserves that enabled them to protect valuable natural and cultural spaces while acknowledging the claims of the people living in these areas. In 2008, at the World Biosphere Reserve Congress in Madrid, the *Madrid Action Plan 2008-2013* was endorsed with the aim of adapting the biosphere reserve concept to the challenges of global change in the 21st century. In July 2013, in the 25th Session of the International Co-ordinating Council of the MAB Programme (MAB ICC), another ground-breaking decision was taken: After implementation of a three-level *Exit Strategy* by the Member States, the World Network of Biosphere Reserves should only include biosphere reserves operating in accordance with the Seville Strategy. Biosphere reserves that could not meet these quality requirements in the longer term would be withdrawn from the World Network of Biosphere Reserves by the respective Member States. At its 38th Session in November 2015, the UNESCO General Conference endorsed the *MAB Strategy 2015-2025* prepared by MAB ICC, which is to make the MAB Programme fit for the challenges of the coming decade.

In response to the ongoing revision of the UNESCO standards, the Austrian MAB National Committee, in cooperation with numerous experts, has now, ten years after the first edition of the criteria was adopted, revised the criteria for Austrian biosphere reserves. The catalogue of criteria comes into force on 1 January 2016. Existing biosphere reserves operating in accordance with the Seville Strategy have a three-year transition period to comply with these criteria.

# **Table of contents**

Preamble	2
1. Submission and acceptance procedure	2
2. National criteria for biosphere reserves in Austria	2
2.1 General criteria	2
2.2 Size and zoning	3
2.3 Management	4
2.4 Planning and development	5
2.5 Participation and awareness raising	5
2.6 Natural and cultural heritage	6
2.7 Research and monitoring	6
2.8 Evaluation and reporting	6
3. Links	7

# Criteria for biosphere reserves in Austria

# Preamble

The international UNESCO designation *biosphere reserve* is the equivalent of the Austrian *Biosphärenpark*. An area designated as a biosphere reserve may carry the added descriptor *Model region for sustainable development*. Officially such a model region must call itself a *biosphere reserve* (Biosphärenpark).

Any newly designated biosphere reserve must include landscapes not yet sufficiently represented by Austrian biosphere reserves and particularly well suited, on the basis of their natural, cultural and social conditions, to implement UNESCO's Man and the Biosphere (MAB) Programme.

## 1. Submission and acceptance procedure

The international designation of an area as a biosphere reserve is the exclusive prerogative of UNESCO's MAB Programme. The official UNESCO nomination forms must be used to propose a region as a biosphere reserve or as part of a cross-border biosphere reserve. The nomination, created by the management or by regional representatives, must be coordinated with the Austrian MAB National Committee even in the planning phase. After it has accepted the nomination, the National Committee submits it to UNESCO. UNESCO may ask for additional information from the MAB National Committee or from the nominating parties. The highest UNESCO decision-making body for the MAB Programme, the MAB International Co-ordinating Council (MAB-ICC), decides on the nomination on the basis of an expert vote of the International Advisory Committee for Biosphere Reserves and informs the UNESCO Director-General about their decision, who officially informs the relevant country of the decision.

Information about submitting a nomination to UNESCO and the nomination form can be found on the homepage of the UNESCO MAB Programme.<sup>1</sup>

Name, acronym and logos of UNESCO, including the logo of the UNESCO MAB Programme are protected internationally. In Austria the Austrian National Commission for UNESCO (Österreichische UNESCO-Kommission, ÖUK) assumes the protection and the rights resulting from it. The ÖUK determines the preconditions for the use and the type of use of the respective logos based on the UNESCO guidelines. On designation as a UNESCO Biosphere Reserve, the administration of the biosphere reserve earns the right to use a biosphere reserve logo for non-commercial purposes. Information on the use of the logo can be obtained from the ÖUK and the MAB National Committee.

# 2. National criteria for biosphere reserves in Austria

- (A) Mandatory criteria: must be met
- (B) Target criteria: are understood objectives to work towards

# 2.1 General criteria

(1) Biosphere reserves are committed to comply with the requirements of the Seville Strategy and with the Statutory Framework of the World Network of Biosphere Reserves<sup>2</sup>. (A)

(2) Biosphere reserves are committed to the guiding principle of sustainable development. By adopting sustainable methods of land use and innovative model projects, they act as models for a path towards a sustainable future. (A)

(3) Biosphere reserves must include different areas with graded forms of land use (see Criterion 10) and help to maintain biological and cultural diversity. (A)

(4) Even before a formal nomination for a designation as biosphere reserve, the inclusion of the local population, representatives of important interest groups, land owners and NGOs in the search for consensus and in decision making must be secured. (A)

(5) Within two years of designation by UNESCO, the international label *Biosphere Reserve* is to be implemented in the national legislation. (A)

(6) Biosphere reserves must strive to form networks and fair cooperation at regional, transregional, national and international level and to ensure the free flow of information within the World Network of Biosphere Reserves. (B)

(7) In border areas it is desirable to create cross-border biosphere reserves. (B) When a biosphere reserve is created that crosses international borders, the criteria in force for national biosphere reserves may be adapted in duly substantiated exceptional cases. For example, the Austrian part of a biosphere reserve and the proportion of core and buffer zones may, as an exception, fall short of the minimum size required by the Austrian criteria, if the total cross-border biosphere reserve complies with the UNESCO standards. If possible, the proportion of core and buffer zones of the total area of a cross-border biosphere reserve should be oriented on Austrian minimum standards. It should be noted that, should the *cross-border* criterion no longer apply, the Austrian part must within three years meet the criteria for a national biosphere reserve.

(8) The content and requirements of complementary instruments of sustainable development with a spatial relation to the biosphere reserve (e.g. Alpine Convention, Natura 2000, Water Framework Directives) must be taken into account in planning and operation of the biosphere reserve. (B)

#### 2.2 Size and zoning

(9) The minimum size of a biosphere reserve is 15,000 ha. Exceptions are possible in duly substantiated cases for cross-border biosphere reserves (see Criterion 7). (A)

(10) A biosphere reserve must be subdivided into core, buffer and development zones. Zone planning must be accompanied by a participatory process involving land owners, representatives of authorities and interest groups and NGOs. (A)

(11) Core zones

a) Size: Core zones must take up at least five percent of the total area and must each be surrounded by a buffer zone. (A)

In Alpine regions a much higher proportion is desirable. (B)

b) Representativity: The core zones must include, in particular, the natural and near-natural ecosystems of the biosphere reserve and/or areas that are especially in need of protection. (A)

c) Legal protection: The core zones must be secured permanently as strictly protected areas (e.g. wilderness areas, conservation areas). (A) Unless the core zones were sufficiently protected even before the nomination, the protection of the area must be secured even during the planning phase (moratorium on land use). (A)

d) Land use: In core zones no use is permitted except extensive traditional forms of land use (careful mountain pasture management, sheep transhumance, etc.) and wildlife stock control or hunting/fishing according to ecologic criteria. Management must control the restrictions on use and accompany them with suitable measures. A management plan must be created for the core zone (see Criterion 22). (A)

The ecologic functionality of the ecosystems must be preserved in its entirety (A). If the integrity of species, habitats or processes is impaired, it is desirable to restore full functionality. \* (B)

For core zone areas which were previously used in agriculture or forestry, an agreement must be reached with the land owners and they may be compensated for loss of revenue and reduction of market value and/or the areas must be purchased and put under a protective designation. (A)

Nature-oriented touristic use or gentle leisure use is possible in core zones but only in compliance with the protection objectives. If these objectives require it, the use of the area must be prohibited or restricted. (A)

### (12) Buffer zones

a) Size: Buffer zones and core zones together must make up at least 20 percent of the total area. In Alpine biosphere reserves, and if special protected assets require it, larger proportions must be demanded. (A)

b) Legal protection: Buffer zone areas must be secured by a suitable protection category (e.g. sanctuaries, Natura 2000 areas, landscape protection areas). (A)

c) Land use: In the buffer zones the protected assets of that particular natural and cultural landscape must be secured. A management plan must be created in close cooperation with those who work the land, plus a system of subsidies to compensate them for the activities needed to care for those landscapes. **(B)** 

## (13) Development zones

a) Size: The size of the development zones must be oriented on feasible delimitations in terms of conservation and spatial planning. Criteria 3, 6 and 7 must be taken into account. **(B)** 

b) Land use: Development zones should embody model standards of innovative sustainable forms of economic and land use activities in agriculture and forestry, crafts, industry, mobility, settlement development, energy use, as well as culture and education, all of which may have an effect beyond the boundaries of the biosphere reserve. **(B)** 

c) The development zone must include settlement areas. (A)

(14) Before using any areas in the development zone of a biosphere reserve for energy production facilities (wind or solar power stations) or large-scale cultivation of energy plant monocultures, a statement from the MAB National Committee must be sought. This also applies to hydropower stations, which might alter the ecological functionality of the catchment area. No such uses are permitted in the core zone. (A)

#### 2.3 Management

(15) An efficient management with secure long-term funding must be present. The nomination of an area as a biosphere reserve must include a confirmation that the budgetary preconditions will be met.(A) Funding from additional sources (e.g. local businesses, biosphere reserve support associations) are desirable. (B)

<sup>\*</sup> If segments of a river are set up as core zones, care must be taken to ensure that the protection objectives of the core zones will not be endangered by interventions upstream. Ideally, legal protection should be put in place that is capable of preventing negative impact on the protected assets of the core zone. With any upstream interventions that might impair the ecologic functionality of the river, the potential impacts on the core zones must be assessed. If lakes are set up as core zones, care must be taken to ensure that the protection objectives of the core zone will not be endangered by interventions in the catchment area. Ideally the catchment area should be integrated into the biosphere reserve and/or legal protection should be put in place to prevent as much as possible negative changes to the core zone from interventions in the catchment area.

(16) It is desirable to supply the management with a staff of experts and administrators with an interdisciplinary composition and to nominate a research officer. (B)

(17) Experts, representatives of NGOs and inhabitants from the region must be included in the advisory bodies for the planning and implementation process. (A)

(18) To ensure a productive exchange of information, the management must maintain close contact with the MAB Committee. Attendance at the sessions of the National Committee at least once a year is mandatory. (A)

(19) The management is under obligation to engage actively in the World Network of Biosphere Reserves and its regional networks (especially EuroMAB). The providers of the biosphere reserve must provide the financial and expert framework, for instance for participation in conferences and workshops with the aim of international networking and sharing expertise. (A)

#### 2.4 Planning and development

(20) Once the biosphere reserve has been designated by UNESCO, a framework concept / guiding principle that determines the protection objectives and the future development of the biosphere reserve and its ecosystems must be created within three years and involve the local population. (A)

(21) The objectives of the biosphere reserve must be integrated into planning at regional and federal state level and taken into account in the relevant spatial planning instruments and/or any updates of other specific planning (e.g. infrastructure, danger zone planning). (A)

(22) A management plan for the entire biosphere reserve area must be developed on the basis of the framework concept within 5 years of designation. (A) It should detail, for instance, measures for the regeneration of impaired ecosystems, on neobiota problems, on restocking with autochthonous fish species, etc.

(23) In all economic sectors (especially agriculture and forestry, energy production and waste management, tourism and leisure) sustainability should be the key criterion. Regional economic cycles and value-adding chains should be set up to create an economic added value for the region and to increase acceptance in the population. (B)

(24) A regional transport concept must be developed to reduce motorized individual transport and achieve good links of the region to the public transport network. (B)

#### 2.5 Participation und awareness raising

(25) The local population as well as representatives of interest groups and NGOs must be involved in the planning phase and the creation of the biosphere reserve as their place of living, earning and leisure and be encouraged to take part in the ongoing operation. (A)

(26) Suitable communication platforms must be set up in the biosphere reserve to allow sharing expertise and presenting individual activities and model projects in the region (web presence, education centres, exhibition spaces, event, etc.). (A)

(27) Optimum information of the population and the visitors about the biosphere reserve, its significance, objectives and education and participation options must be ensured (sign-posting in the field, brochures, web pages, public relation efforts in the media, etc.). (A) An information centre that operates all year round should be set up. (B)

(28) In biosphere reserves a deeper understanding of the relation of humans with nature is to be achieved through awareness raising programmes. These education options should be targeted at all generations, from school groups to senior citizens. (B)

(29) The tasks of the management include supporting regional actors in implementing suitable project proposals and to encourage them repeatedly in new eye-level initiatives. (B)

## 2.6 Natural and cultural heritage

(30) The specific natural and cultural assets of a biosphere reserve must be inventoried if that is necessary to implement the declared protection and development objectives. Measures to preserve species, habitats, landscape elements, cultural assets or traditional methods of land use and local crafts that deserve special protection must be listed and implemented. Management must monitor progress towards achieving the protection and development objectives. (A)

(31) In any intervention in the natural ecosystem or landscape and in any mitigation measures, regional guiding principles, environmental quality objectives and standards must be taken adequately into account. (A)

(32) In biosphere reserves the cultural, social and political forms of expression of the population are to be encouraged. As a model region for sustainable development, the biosphere reserve should provide incentives for joint learning, for innovation and for trying out new strategies for a more sustainable development. (B)

## 2.7 Research & monitoring

(33) The biosphere reserve management must support research in the region and communicate it unless other institutions at federal state or regional level fulfil this task. (A) A scientific advisory board must be created. (A)

(34) Research in biosphere reserves should expand our knowledge about the interdependencies between man and the biosphere in the service of further development in the region. (B)

(35) In biosphere reserves basic research should also be conducted in addition to the focus on applied research. Natural and social science issues should be investigated in equal measure and priority given to trans- und interdisciplinary projects. (B)

(36) The population should be integrated in research projects (B) via:

a) information on planned investigations and/or relevant results (popular science publications, talks, etc.)

b) integration of local knowledge of the population into research approaches

c) integration of the population into research activities (e.g. capturing data, etc.)

d) letting the population formulate their own research questions and/or assess planned projects (maybe introduce a two-pronged evaluation of research projects – by experts and from the perspective of the locals)

(37) It is desirable for any research efforts to engage in trans-regional cooperation with universities, research institutions, museums, dedicated associations, etc.. Regular exchange with the UNESCO MAB World Network of Biosphere Reserves on research results and expertise must be ensured. (A)

(38) Biosphere reserves are to be used predominantly as long-term monitoring stations of the environment. From the start it is desirable to go for integrated monitoring that includes socioeconomic components (BRIM). International programmes, for instance those related to issues of global change or biodiversity, should receive priority consideration. (B)

#### 2.8 Evaluation and reporting

(39) Every ten years the state of the biosphere reserve must be presented in accordance with the UNESCO report form (periodic review)<sup>3</sup>. (A) Within that period it is recommended that self-

assessments be carried out on the basis of the indicators for the implementation of the Seville Strategy. (B)

(40) The Austrian MAB National Committee has the right to carry out assessments of the development of the entire biosphere reserve or parts of it as it sees fit.

If a biosphere reserve should not meet the criteria, the National Committee retains the right to demand compliance with the criteria. If these are not met, the National Committee may, in line with the Statutory Framework of the UNESCO World Network of Biosphere Reserves (Article 9, Clause 8), have that biosphere reserve removed from the list of the World Network of Biosphere Reserves.

# 3. Links:

<sup>1</sup><u>http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/designation-process/</u>

<sup>2</sup> http://unesdoc.unesco.org/images/0010/001038/103849e.pdf

<sup>3</sup> <u>http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/periodic-review-process/</u>

#### CONTACT:

#### Österreichisches MAB-Nationalkomitee

an der Österreichischen Akademie der Wissenschaften Dr. Ignaz Seipel-Platz 2 1010 Wien

Chairman: Assoc. Prof. DI Dr. Arne Arnberger Secretariat: Mag. Dr. Günter Köck Email: <u>arne.arnberger@boku.ac.at</u>; Tel. +43 1 47654 7205 Email: <u>guenter.koeck@oeaw.ac.at</u>; Tel. +43 1 51581 2771