

Preamble

The term “**Biosphärenpark**” is the Austrian equivalent of the international UNESCO designation “**biosphere reserve**”. A region thus designated may describe itself as “**Modellregion für nachhaltige Entwicklung**” (model region for sustainable development).

The designation of a region as biosphere reserve is carried out on an **international** level by the **UNESCO¹ MAB office**. First an **application** must be made to the **Austrian MAB National Committee**, who on approval passes it on to UNESCO.

Close coordination between the management and/or regional representatives of the proposed biosphere reserve and the Austrian MAB National Committee is therefore recommended, both during the planning phase and in the day-to-day management of the reserve.

For the currently existing Austrian biosphere reserves there is a **five year transition period** from the date the “National Criteria for Biosphere Reserves in Austria” come into force. Should the areas, at the end of that period, not adequately fulfil the national criteria, the Austrian MAB National Committee reserves the right to **recommend** to UNESCO that the **designation be revoked**. In general, exceptions can only be granted for areas that can prove exceptional societal or scientific value (e.g. long series of measurements in environmental monitoring) and in cases where this value cannot be adequately safeguarded by the current conservation category or by inclusion into another conservation category.

National Criteria for Biosphere Reserves in Austria

(A) – **Critical criteria (must be fulfilled unconditionally)**

(B) – **Key target criteria (to be understood as objectives; their realisation should be made a priority)**

General aspects

- (1) Biosphere reserves commit themselves to fulfilling the requirements of the “**Seville Strategy**” as well as the “**International Guidelines for the World Network of Biosphere Reserves**”. (A)
- (2) Biosphere reserves commit themselves to the **vision of sustainable development**. They show the **way into a sustainable future** through exemplary sustainable land-use and innovative model projects, not just for the reserve itself but also for the adjacent regions. (A)
- (3) Biosphere reserves must contain different areas of **graded forms of human use/use** and contribute to preserving biological and cultural diversity. (A)
- (4) Steps must be taken to ensure that the local population, representatives of important interest groups, landowners and NGOs are involved in opinion-forming and decision-making processes before a formal application is filed to nominate a biosphere reserve. The proposed nomination of a biosphere reserve must be preceded by a **comprehensive consensus-finding process within the region**. (A)
- (5) Provision must be made to **integrate** the international designation “biosphere reserve” **into national legislation**. Existing biosphere reserves must be integrated within **five years** from the criteria coming into force. (A)

¹ The MAB office is made up of six elected representatives. It is the executive organ of the International Coordination Council (ICC) of the UNESCO MAB Programme.

- (6) In the long run, each of the most important natural and cultural landscapes of Austria² should be represented in the national network of biosphere reserves by **at least one UNESCO model region**. (B)
- (7) Forging **networks** and **cooperations** of biosphere reserves at regional, cross-regional, national and international level should be made a key target. Free exchange of information should be ensured. (B)
- (8) In border areas installing **cross-border biosphere reserves** should be made a key target. (B)

Acreage and Zoning

- (9) Biosphere reserves must have a **minimum size of 15,000 ha**. Exceptions are possible in well argued cases. Undersized biosphere reserves must still be able to fulfil the three main functions of a biosphere reserve. (A)
- (10) Biosphere reserves must be sub-divided into **core, buffer and development or transition zones**³. Zone planning must be accompanied by a **participation process** that includes landowners, representatives of regional interest groups and NGOs. (A)
- (11) **Core zones**

a) Size

The core zones must take up at least **five percent** of the total area and be big enough to let natural ecosystems, i.e. natural models not used by humans, evolve. (A). In Alpine regions a much higher percentage should be aimed for. (B)

b) Representation

The core zones must to a large degree include the natural or near-natural ecosystems of the biosphere reserve (maintenance-free) or areas **that merit particular protection**. (A)

c) Legal safeguards

The core zones must be safeguarded in perpetuity as **strict protection areas** (such as wilderness areas, national parks, nature conservation areas, special zone regulations). (A)

If the core zones were not sufficiently protected prior to application, area protection should be secured in the planning phase already (moratorium on human use). (B)

d) Human use

There must be **no human use of any kind** in the core zones. **Traditional extensive forms of land-use**, such as extensive mountain pasture grazing, sheep grazing, etc., are exempt as are **stock management or hunting and fishing according to ecological criteria**. The restrictions on human use must be controlled by the management and accompanied by suitable measures. (A)

A key target is the conservation and reintroduction of autochthonic species of fish. (B)

For core zone areas that were previously used for agriculture or forestry, the consent of the landowners must be obtained and if necessary their loss of income and the reduction in value be compensated for, or, if necessary, such areas must be bought and safeguarded by a protective designation. (A)

² See map of cultural landscapes in appendix 2

³ The UNESCO definitions of core, buffer and development or transition zones can be found in appendix 1.

Gentle and extensive forms of tourist or leisure use are possible within the core zones but they must be **compatible with the protection objectives**. If the protection objectives require it, human use must be prohibited or restricted. (A)

(12) **Buffer zones**

a) Size

The buffer zones, together with the core zones, must make up **at least 20 percent** of the total area. In Alpine biosphere reserves, and where special content requires protection, larger percentages must be requested. (A)

b) Legal safeguards

Areas in the buffer zone that are to be made available over and above the regulatory standards must be protected within the framework of contractual environmental protection. In addition, contiguous buffer zone areas that make up a coherent and self-contained landscape must be safeguarded by a suitable protection category (e.g. tranquillity zone, protected landscape) (A)

c) Human use

Within the buffer zones **special content of the respective natural or cultural landscape that warrants particular protection** must be safeguarded. A management plan must be drawn up in close cooperation with the people who use the areas and a system of subsidies developed that reimburses the efforts necessary for the maintenance of the area. (B)

(13) **Transition zones**

a) Size

The size of the transition zones must be determined by well-founded demarcations of nature protection and spatial planning. Criteria 3, 6, and 8 must be taken into account. (B)

b) Human use

By employing **innovative sustainable economic and human use practices**, the transition zones should set paradigmatic standards for the entire region with regard to agriculture and forestry, crafts, trade and industry, as well as culture and education. (B)

Management

(14) There must be a **capable management** in place. The application for setting up a biosphere reserve must contain a concrete approval for a **financial basis**. (A)

(15) A key target should be to install a management made up of an **interdisciplinary** mix of specialists and administrators and to appoint a person **responsible for research**. (B)

(16) Experts, representatives of NGOs and citizens of the region must be included in the planning and implementation process as members of **consultative special bodies** or as **advisers**. (A)

Planning and Development

- (17) Within **three years** of UNESCO designation as a biosphere reserve, a **framework concept / vision** must be drawn up in which the population has been involved and which states the objectives for the protection and future development of the biosphere reserve and its ecosystems. (A)
- (18) The objectives of the biosphere reserve must be integrated into the **planning at federal state and regional level** and taken into account in their respective land-use instruments and other special planning (e.g. infrastructure, danger zone planning). (A)
- (19) On the basis of the framework concept, **maintenance and development plans** should be drawn up and measures for the regeneration of damaged ecosystems be put forward and carried out. (B)
- (20) In all economic areas, particularly in agriculture and forestry as well as energy provision and waste management, **sustainability** should have priority. Regional economic cycles and value-adding chains must be built up to create **added value** for the region and so increase acceptance within the population. (B)
- (21) A **regional transport concept** must be drawn up aimed at reducing overall traffic and achieving a good tie-in of the region with the public transport network. (B)
- (22) The free **IPAM toolbox** is recommended as internal planning tool and for the day to day management of a biosphere reserve (<http://www.ipam.info>). (B)

Participation and Awareness

- (23) The local population plus representatives of interest groups and NGOs must be **included in all planning and formation** processes of the biosphere reserve as their living, economic and recreational space and **motivated to continue their involvement**. (A)
- (24) In the biosphere reserve **communication platforms** must be set up that enable an exchange of experiences and the presentation of individual activities and model projects within the region (representation on the web, educational centres, venues for exhibitions, events, etc.). (A)
- (25) Visitors and citizens must be informed as well as possible about the biosphere reserve, its importance, objectives, education and participation options (signs in the area, leaflets, web-sites, PR in the media, etc.). (A)
- (26) Awareness programmes in biosphere reserves aim at deepening our understanding of the **relationship between humans with their economic activities and nature**. Such educational options should be offered for all generations from school classes to senior citizens' groups. (B)
- (27) The tasks of the management include **helping** regional actors to implement suitable project ideas and continuing to motivate them to engage in new partnership initiatives. (B)

Natural and Cultural Heritage

- (28) An inventory must be drawn up of the special **natural and cultural goods** of a biosphere reserve, if this is necessary for the implementation of declared protection and development objectives. Measures for the preservation of species, habitats, landscape sections and cultural goods that warrant particular protection must be presented and implemented. Management must monitor the realisation of the protection objectives. (A)

- (29) Any **invasive measures into the ecosystem** or landscape features as well as compensatory or replacement measures must adequately take into account **regional visions, environmental quality objectives and standards**. (A)
- (30) In biosphere reserves the population's cultural, social and political scope for expression should be encouraged. (B)

Research & Monitoring

- (31) The management of the biosphere reserve has the task of **coordinating, documenting and communicating research** in the region, as long as no other institution at federal state or regional level fulfils this task. (A)
- (32) Research in biosphere reserves should **deepen our understanding of the interaction between man and the biosphere** and help develop the region further. (B)
- (33) In biosphere reserves basic research should be carried out alongside a **focus on applied research**. Issues of natural and social science should be investigated with equal weighting and interdisciplinary projects prioritised. (B)
- (34) The **population must be integrated in research projects** (B) through:
- information on planned investigations and about relevant results (popular science publications, talks, etc.)
 - integration of traditional knowledge of the population into research approaches
 - integration of the population into research work (e.g. capturing of data, etc.)
 - formulating research questions of their own or assessment of planned projects by the population (possibly introducing a two-track assessment of research projects – by experts and from the population's point of view)
- (35) Research efforts should be directed towards cross-disciplinary **transregional** (with universities, museums, expert associations, etc.) and **international** cooperations (particularly within the UNESCO MAB network). (B)
- (36) Biosphere reserves should primarily be used as **long-term environmental monitoring sites**. From the start, integrated monitoring that includes socio-economic components (**BRIM**⁴) should be made a key target. (B)

International programmes concerned with issues such as global change or biodiversity (e.g. GLORIA⁵ or GLOCHAMORE⁶ Research Strategy) should receive particular attention. (B)

Areas in which long-term data of certain indicators have been gathered already should be secured for further capture of data and put under special protection. (B)

⁴ Biosphere Reserve Integrated Monitoring

⁵ Global Observation Research Initiative in Alpine Environments (<http://www.pph.univie.ac.at/gloria/gloria.html>)

⁶ Global Change in Mountain Regions (<http://mri.scnatweb.ch/content/category/3/10/31/>)

Evaluation and Reporting Duties

- (37) Every **ten years** the state of the biosphere reserve must be reported using the UNESCO (**periodic review**) reporting form. Every **five years** the Austrian **MAB National Committee** must be informed about the current state and the development of the respective biosphere reserve. (A)

In between the reporting times it is recommended to carry out evaluations on the basis of the indicators for the implementation of the Seville Strategy. (B)

- (38) The Austrian MAB National Committee is free at any time to evaluate the development of the whole biosphere reserve or parts thereof as it sees fit.

Appendix 1: Definitions of core, buffer and transition zones

a) according to the “Biosphere Reserves Concept” in Seville Strategy:

Physically, each biosphere reserve should contain **three elements**:

- one or more **core areas**, which are securely protected sites for conserving biological diversity, monitoring minimally disturbed ecosystems, and undertaking non-destructive research and other low-impact uses (such as education);
- a clearly identified **buffer zone**, which usually surrounds or adjoins the core areas, and is used for cooperative activities compatible with sound ecological practices, including environmental education, recreation, ecotourism, and applied and basic research;
- and a **flexible transition area**, or area of co-operation, which may contain a variety of agricultural activities, settlements and other uses and in which local communities, management agencies, scientists, non-governmental organizations, cultural groups, economic interests and other stakeholders work together to manage and sustainably develop the area's resources.

Although originally envisioned as a series of concentric rings, the three zones have been implemented in many different ways in order to meet local needs and conditions. In fact, one of the greatest strengths of the biosphere reserve concept has been the flexibility and creativity with which it has been realized in various situations.

b) according to the Statutory Framework of the World Network of Biosphere Reserves

Article 4 – Criteria (5):

It should include these functions, through appropriate zonation, recognizing:

- a legally constituted core area or areas devoted to long-term protection, according to the conservation objectives of the biosphere reserve, and of sufficient size to meet these objectives;
- a buffer zone or zones clearly identified and surrounding or contiguous to the core area or areas, where only activities compatible with the conservation objectives can take place;
- an outer transition area where sustainable resource management practices are promoted and developed.

Appendix 2: Map of cultural landscapes in Austria

Map: Wrbka et al., 2000.

In: Wrbka et al., 2002: Kulturlandschaftsgliederung Österreich. Forschungsprogramm Kulturlandschaft 13. Bundesministerium für Bildung, Wissenschaft und Kultur, Wien. CD-Rom

