

**PROTOCOL  
ON THE IMPLEMENTATION OF THE ALPINE CONVENTION OF 1991 IN THE DOMAIN  
OF SOIL CONSERVATION**

**PROTOCOL ON SOIL CONSERVATION**

**Preamble**

The Federal Republic of Germany,  
the French Republic,  
the Italian Republic,  
the Principality of Liechtenstein.  
the Principality of Monaco,  
the Republic of Austria,  
the Swiss Confederation,  
the Republic of Slovenia  
as well as  
the European Union –

fulfilling their mandate on the basis of the Convention on the Protection of the Alps (Alpine Convention) of 7 November 1991 to ensure a holistic policy for the protection and sustainable development of the Alpine region,

discharging their obligations in accordance with paragraphs 2 and 3 of article 2 of the Alpine Convention,

aiming to reduce quantitative and qualitative soil impairments, in particular by applying agricultural and silvicultural production processes which have a minimal detrimental impact on the soil, by using land economically, controlling erosion and restricting soil sealing,

aware of the fact that the protection of the Alpine soils, their sustainable management and the restoration of their natural functions in impaired locations are matters of general interest,

recognising that the Alps, constituting one of the largest continuous natural areas in Europe, are characterised by an ecological diversity and by highly sensitive ecosystems whose functionality must be preserved,

convinced that the resident populations must be enabled to define, by themselves, ideas for societal, cultural and economic development and to take part in the implementation of their ideas within the framework of their respective national legal system,

aware that the Alps are an important living and economic environment for the resident populations and a recreational environment for the populations of other regions on the one hand; and that on the other hand, the preservation of soil functions is jeopardised by diverging claims for utilisation which clash within the narrow confines of the Alpine region; and that for this reason, economic interests must be reconciled with ecological requirements,

recognising that the soil occupies a special position within ecosystems, that its formation as well as the regeneration of impaired soils happen very slowly, that increased soil erosion is to be expected owing to topographical conditions in the Alpine region, and that the soil constitutes a sink for harmful substances while contaminated soils can be a source of inputs of those substances into neighbouring ecosystems, thus putting at risk humans, animals and plants,

aware that soil utilisation, especially for the purposes of human settlement development, trade and industry, infrastructures, mining for mineral resources, tourism, agriculture, forestry and transport can lead to quantitative or qualitative soil impairments and that accordingly, adequate cross-disciplinary measures should be proposed to prevent, control and repair damage to the soil,

considering that soil conservation has manifold implications for other political spheres in the Alpine region and should therefore be coordinated in a cross-disciplinary and cross-departmental fashion,

convinced that certain problems can only be solved by a cross-border approach and require the Alpine States to work out joint actions which are implemented by the Signatories in accordance with the available means -

have agreed as follows:

## **Chapter I**

### **General Obligations**

#### **Article 1**

##### **Objectives**

(1) This Protocol serves to implement the obligations in the domain of soil conservation entered into by the Contracting Parties to the Alpine Convention.

(2) The Alpine soil shall be preserved in a sustainable manner to allow it to deliver

1. its natural functions as
  - a) a livelihood resource and a living environment for humans, animals, plants and micro-organisms,
  - b) a characteristic element of nature and the Alpine landscape,
  - c) an integral part of the ecological balance, especially with regard to its water and nutrient cycles,
  - d) a conversion and compensating medium for the influences of substances, especially due to its filtering, buffering and storage qualities, for the protection of groundwater in particular,
  - e) a genetic reservoir,
2. its function as an archive of natural history and the history of civilisation, as well as
3. its functions as
  - a) a location for agricultural use including pasture farming and forestry,
  - b) a space for human settlement and tourism activities,
  - c) a location for other commercial usages, for transport, supply and disposal,
  - d) a deposit of raw materials.

The ecological soil functions in particular, which form essential elements of the ecological balance, shall be safeguarded and preserved both qualitatively and quantitatively on a long-term basis. The restoration of impaired soils shall be promoted.

(3) The measures to be taken are aimed specifically at soil utilisation which suits its location, at the economical use of land resources, at the avoidance of erosion and detrimental changes to the soil structure, and at minimising the input of substances harmful to the soil.

(4) The diversity of soils, which is typical of the Alpine region, and its characteristic locations shall be preserved and promoted in particular.

(5) In this endeavour the principle of prevention, which comprises the safeguarding of the functionality of soils and the possibility to use them for various purposes as well as their availability to future generations with a view to sustainable development, is of particular significance.

#### **Article 2**

##### **Fundamental Obligations**

(1) The Contracting Parties undertake to initiate the requisite legal and administrative measures for ensuring the conservation of soils in the Alpine region. The respective national authorities shall be responsible for monitoring those measures.

(2) If there is a risk of serious and sustained damage to the functionality of soils, protective aspects shall, as a matter of principle, be given priority over aspects of utilisation.

(3) The Contracting Parties shall explore the possibilities of supporting, through fiscal and/or financial measures, the actions for soil conservation in the Alpine region targeted by this Protocol. Measures compatible with soil conservation and with the objectives of a prudent and environmentally sound utilisation of soils shall be specially supported.

#### **Article 3**

##### **Consideration of the Objectives in Other Policies**

The Contracting Parties undertake to take into consideration the objectives of this Protocol in their other policies. In the Alpine region, this applies specifically to regional planning, settlement and transport, energy management, agriculture and forestry, raw material extraction, trade and industry, tourism, nature conservation and landscape upkeep, water and waste management, and clean air.

## **Article 4**

### **Involvement of Territorial Authorities**

(1) Within the framework of the respective national legal system, each Contracting Party shall determine the level most suitable for coordination and cooperation between the institutions and territorial authorities directly concerned, in order to encourage shared responsibilities, specifically to develop and utilise mutually intensifying forces in executing soil conservation policies and in translating into action the resultant measures in the Alpine region.

(2) Those territorial authorities directly concerned shall be involved in the various stages of preparing and implementing these policies and actions, within the scope of their authority and within the framework of the respective national legal system.

## **Article 5**

### **International Cooperation**

(1) The Contracting Parties shall encourage stronger international cooperation among the competent institutions, especially with regard to the drawing up of soil registers, soil monitoring, the designation and monitoring of protected and impaired areas and danger zones, the provision and harmonisation of databases, the coordination of Alpine-specific soil conservation research, and mutual reporting.

(2) The Contracting Parties undertake to remove obstacles to international cooperation between territorial authorities in the Alpine region, and to encourage solutions to shared problems at the most suitable level.

(3) If the definition of measures relating to soil conservation is within the national or international competence, the territorial authorities shall be given possibilities to efficiently represent the interests of the population.

## **Chapter II**

### **Specific Measures**

## **Article 6**

### **Designation of Protected Areas**

The Contracting Parties shall see to it that soils worthy of protection are included in the designation of protected areas. Specifically, soil and rock formations which have particularly characteristic features or a particular significance for the documentation of Earth's history, shall be preserved.

## **Article 7**

### **Economical and Prudent Use of Soils**

(1) In drawing up and implementing plans and/or programmes according to article 9 paragraph 3 of the Protocol on Spatial Planning and Sustainable Development, matters regarding soil conservation, especially the economical use of soil and land, shall be taken into consideration.

(2) In order to limit soil sealing and soil consumption, the Contracting Parties shall provide for space-saving construction and an economical use of soil resources. They shall preferably seek to keep the development of human settlements within existing boundaries and to limit settlement growth outside these boundaries.

(3) When assessing the spatial and environmental compatibility of large-scale projects in the domains of trade and industry, construction and infrastructure, especially in the transport, energy and tourism sectors, soil conservation and the scarcity of space in the Alpine region shall be taken into account within the framework of the national procedures.

(4) Where natural conditions allow it, disused or impaired soils, especially landfills, slag heaps, infrastructures or ski runs, shall be restored to their original state or shall be recultivated.

## **Article 8**

### **Economical Use and Prudent Extraction of Mineral Resources**

(1) The Contracting Parties shall see to it that mineral resources are used economically. They shall work towards ensuring that preference is given to the utilisation of substitute materials and that recycling options are fully used or their development is encouraged.

(2) When extracting, processing and utilising mineral resources, impairments of other soil functions shall be reduced to a minimum. In those areas which are particularly important for the protection of soil functions and in areas specifically designated as drinking water resources, the extraction of mineral resources shall be foregone.

## **Article 9**

### **Conservation of Soils in Wetlands and Moors**

(1) The Contracting Parties undertake to preserve high moors and lowland moors. To achieve this objective, the use of peat shall be discontinued completely in the medium term.

(2) Drainage schemes in wetlands and moors shall be limited to the upkeep of existing networks unless there are sound reasons for exceptions. Remedial measures shall be promoted to minimise the environmental impact of existing drainage systems.

(3) On principle, moor soils shall not be utilised or, when used for agricultural purposes, shall be managed so that their characteristic features remain intact.

## **Article 10**

### **Designation and Management of Endangered Areas**

(1) The Contracting Parties agree to draw up maps of Alpine areas which are endangered by geological, hydrogeological and hydrological risks, in particular by land movement (mass slides, mudslides, landslides), avalanches and floods, to register those areas and to designate danger zones when necessary. If applicable, seismic risks shall also be considered.

(2) The Contracting Parties shall make sure that engineering techniques are used in endangered areas which are as compatible with nature as possible, and that local and traditional building materials which suit the local countryside are used. These measures shall be supported by appropriate silvicultural measures.

## **Article 11**

### **Designation and Management of Alpine Areas Threatened by Erosion**

(1) The Contracting Parties undertake to map Alpine areas threatened by extensive erosion on the basis of comparable criteria for quantifying soil erosion, and to register those areas in as far as this is necessary for the protection of material goods.

(2) Soil erosion shall be limited to the inevitable minimum. Areas damaged by erosion and land movement shall be rehabilitated in as far as this is necessary for the protection of human beings and material goods.

(3) To protect human beings and material goods, measures to control water erosion as well as measures to reduce surface run-off shall preferably comprise hydraulic, engineering and silvicultural techniques with minimal environmental impact.

## **Article 12**

### **Agriculture, Pasture Farming and Forestry**

(1) To ensure protection against erosion and harmful soil compaction, the Contracting Parties undertake to use sound practices in agriculture, pasture farming and forestry which are adapted to suit local conditions.

(2) As regards the input of substances through the use of fertilisers, herbicides and pesticides, the Contracting Parties shall strive to elaborate and implement shared standards for sound expert practices. The type, quantity and time of fertilisation shall be orientated to the needs of the plants, taking into account the nutrients available in the soil, the organic substance as well as the location of the plants and the conditions in which they are cultivated. This is achieved by using ecological/biological and integrated methods of cultivation, as well as by matching livestock with natural local growth conditions.

(3) In Alpine pasture areas, the usage of mineral fertilisers and synthetic herbicides and pesticides in particular shall be minimised. The use of sewage sludges shall be foregone.

## **Article 13**

### **Silvicultural and Other Measures**

(1) With regard to mountain forests which offer a high degree of protection to their own location, or above all to human settlements, transport infrastructures, croplands and similar areas, the Contracting Parties undertake

to give priority to the protective function of these forests and to gear their silvicultural management towards preserving this function. Such mountain forests shall be preserved in their original locations.

(2) Specifically, forests shall be used and maintained in such a way that soil erosion and harmful soil compaction are avoided. To achieve this, silvicultural measures adapted to local conditions as well as natural forest rejuvenation shall be promoted.

## **Article 14**

### **Effects of Tourism Infrastructures**

- (1) The Contracting Parties shall use their influence in the most appropriate manner to ensure that
- detrimental effects of tourism activities on Alpine soils are avoided,
  - soils impaired by intensive tourism are stabilised, especially and whenever possible by restoring the vegetation cover and applying environmentally sound engineering techniques. Further utilisation of the soils shall seek to prevent such damage from recurring,
  - permits for the construction and levelling of ski runs in forests with a protective function are granted only in exceptional cases and with the proviso that compensatory action is taken, and that such permits are not granted for fragile areas.

(2) Chemical and biological additives for the grooming of ski runs are permissible only if proof of their ecological harmlessness has been furnished.

(3) In case significant damage to soils and vegetation is found to exist, the Contracting Parties shall take the necessary remedial action at the earliest possible point in time.

## **Article 15**

### **Limiting Inputs of Harmful Substances**

(1) The Contracting Parties shall do everything in their power to minimise, through preventive action, inputs of harmful substances into the soils through water, air, waste and other substances harmful to the environment. Preference shall be given to measures limiting emissions at their sources.

(2) To avoid soil contamination when using dangerous substances, the Contracting parties shall issue technical regulations, provide for checks, carry out research programmes and engage in educational work.

## **Article 16**

### **Environmentally Compatible Utilisation of Gritting Materials**

The Contracting Parties undertake to minimise the use of gritting salt and, wherever possible, to use slippage-preventing and less contaminating materials such as gravel and sand.

## **Article 17**

### **Contaminated Soils, Environmental Liabilities, Waste Management Concepts**

(1) The Contracting Parties undertake to survey and document their environmental liabilities and suspicious landfills (environmental liabilities register), to analyse the condition of those areas and to assess their hazard potential using comparable methods.

(2) To avoid soil contamination and to ensure the environmentally compatible pretreatment, treatment and disposal of waste and residual materials, waste management concepts shall be drawn up and implemented.

## **Article 18**

### **Further measures**

The Contracting Parties may take measures regarding soil conservation which go beyond the measures provided for in this Protocol.

## **Chapter III**

### **Research, Education and Information**

#### **Article 19**

##### **Research and Monitoring**

(1) The Contracting Parties shall cooperate closely to promote and harmonise research projects and systematic monitoring programmes which are conducive to achieving the objectives of this Protocol.

(2) The Contracting Parties shall ensure that the respective results of national research and systematic monitoring projects are incorporated into a joint system of ongoing monitoring and information, and that the results are made accessible to the public within the framework of the respective national legal system.

(3) The Contracting Parties agree to coordinate their Alpine-specific research projects on soil conservation while taking into account other national and international research developments, and to envisage joint research activities.

(4) Special attention shall be given to evaluations of soil sensitivity regarding diverse human activities, to assessments of the regenerative capacity of soils, and to the examination of the most suitable pertinent technologies.

#### **Article 20**

##### **Establishment of Harmonised Databases**

(1) The Contracting Parties agree to create comparable databases (soil parameters, sampling, analysis, evaluation) within the framework of the Alpine monitoring and information system, and to establish possibilities for data exchange.

(2) The Contracting Parties shall reach agreement about soil-endangering substances which require priority treatment, and they shall strive for comparable evaluation parameters.

(3) The Contracting Parties shall strive to establish representative records of the condition of Alpine soils taking into account the geological and hydrogeological situation, on the basis of identical evaluation systems and harmonised methods.

#### **Article 21**

##### **Establishment of Permanent Monitoring Areas and Coordination of Environmental Monitoring**

(1) The Contracting Parties undertake to establish permanent monitoring areas in the Alpine region and to integrate them in an Alpine-wide soil monitoring network.

(2) The Contracting Parties agree to coordinate their national soil monitoring programmes with the environmental monitoring programmes for air, water, flora and fauna.

(3) Within the framework of their monitoring programmes, the Contracting Parties shall establish soil sample databases according to comparable parameters.

#### **Article 22**

##### **Education and Information**

The Contracting Parties shall promote the education and further training as well as the information of the public regarding the objectives, measures and implementation of this Protocol.

## **Chapter IV**

### **Implementation, Monitoring and Assessment**

#### **Article 23**

##### **Implementation**

The Contracting Parties undertake to ensure the implementation of this Protocol by taking appropriate measures within the framework of the respective national legal system.

## **Article 24**

### **Monitoring of Adherence to the Obligations**

(1) The Contracting Parties shall report to the Standing Committee at regular intervals on the measures taken on the basis of this Protocol. Their reports shall include information on the efficiency of the measures taken. The Alpine Conference shall determine the intervals at which the reports are delivered.

(2) The Standing Committee shall examine the reports for adherence of the Contracting Parties to the obligations under this Protocol. The Standing Committee may request additional information from the Contracting Parties or use information from other sources.

(3) The Standing Committee shall draw up a report to inform the Alpine Conference whether the Contracting Parties have adhered to their obligations under this Protocol.

(4) The Alpine Conference shall take note of the report. Should the Alpine Conference find that a Contracting Party has failed in its obligations, the Conference can adopt recommendations.

## **Article 25**

### **Assessment of the Efficiency of the Provisions**

(1) The Contracting Parties shall examine and assess the efficiency of the provisions contained in this Protocol at regular intervals. In as far as this is necessary to achieve the objectives of this Protocol, they will initiate suitable amendments to the Protocol.

(2) Within the framework of the respective national legal system, the territorial authorities shall be involved in the assessment process. Pertinent nongovernmental organisations may be heard.

## **Chapter V**

### **Final Provisions**

## **Article 26**

### **Relationship between the Alpine Convention and the Protocol**

(1) This Protocol is a Protocol to the Alpine Convention within the meaning of Article 2 and the other pertinent articles of the Alpine Convention.

(2) Only Contracting Parties to the Alpine Convention shall be Contracting Parties to this Protocol. Any Contracting Party which denounces the Alpine Convention shall be considered as also having denounced this Protocol.

(3) Whenever the Alpine Conference decides on issues relating to this Protocol, only the Contracting Parties to this Protocol shall have a right to vote.

## **Article 27**

### **Signature and Ratification**

(1) This Protocol shall be open for signature by the Signatory States of the Alpine Convention and the European Union on 16 October 1998; it shall be open for signature from 16 November 1998 in the Republic of Austria as the depositary.

(2) For Contracting Parties which have expressed their consent to be bound by this Protocol, the Protocol shall enter into force three months after the date on which three States have deposited their instruments of ratification, acceptance or approval.

(3) For Contracting parties which subsequently express their consent to be bound by this Protocol, the Protocol shall enter into force three months after the date of deposit of their instruments of ratification, acceptance or approval. After an amendment to the Protocol has entered into force, each new Contracting Party to this Protocol shall become a Contracting Party to the Protocol in its amended version.

## **Article 28**

### **Notifications**

The depositary shall notify each State mentioned in the Preamble and the European Union of

- a) any signature,
- b) the deposit of any instrument of ratification, acceptance or approval,
- c) any date of entry into force,
- d) any declaration made by a Contracting Party or Signatory State,
- e) any denunciation made by a Contracting Party, including the date on which it becomes effective.

In witness whereof the undersigned, being duly authorised thereto, have signed this Protocol.

Done at Bled on 16 October 1998 in the German, French, Italian and Slovene languages, each text being equally binding; the original text shall be deposited in the Austrian State archives. The depositary shall send a certified copy to each of the Signatory States.