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**COMMITTEE ON THE ACTIVITIES OF THE COUNCIL OF EUROPE IN THE  
FIELD OF BIOLOGICAL AND LANDSCAPE DIVERSITY**

**(CO-DBP)**

**Group of Specialists – European Diploma of Protected Areas**

**SIEBENGEBIRGE NATURE RESERVE  
(Germany)**

**RENEWAL OF THE  
EUROPEAN DIPLOMA FOR PROTECTED AREAS**

Expert appraisal by  
Mr Charles STAUFFER  
(France)

The European Diploma was awarded to the Siebengebirge Nature Reserve in 1971 and thereafter renewed.

The secretariat did not accompany the expert on his visit to the park.

Appendix I contains Resolution (96) 25 which was adopted when the Diploma was last renewed. Appendix II contains a draft resolution prepared by the secretariat for the purposes of a further renewal.

*Having decided to consider renewing the European Diploma awarded to the Siebengebirge Nature Reserve, the Secretariat of the Council of Europe asked me to conduct an on-the-spot appraisal in order to compare the state of the area with that prevailing at the time the diploma was awarded and successive renewals were granted.*

*This document presents the findings of my appraisal, which I carried out unaccompanied by any Council of Europe representative.*

## 1. GENERAL REMARKS

The Siebengebirge Nature Reserve received the C-category European Diploma in 1971. The diploma has since been renewed every five years, the last time in 1996 in accordance with recommendations adopted at the group of specialists' 1996 meeting (Resolution (96) 25).

As well as assessing the conditions and recommendations issued in 1996, I was able to give more detailed consideration to a number of specific points. The fact that this was my third appraisal of the Siebengebirge reserve made that task much easier.

## 2. INSPECTION

The on-the-spot appraisal was conducted on 27 and 28 June 2000. No representative of the Council of Europe secretariat was able to accompany me.

After making initial contact with Mr FASSBINDER and Mr SECHTEM on the first evening, the next day I met:

|               |   |
|---------------|---|
| Mr BRAND      | Ministry of the Environment   |
| Mr FASSBINDER | President of the Verschönerungs-Verein des Siebengebirges (VVS)         |
| Mr SECHTEM    | Director of the VVS   |
| Mr WERTZ      | Bürgermeister of Koenigswinter  |
| Mr KRÄMER     | Former Bürgermeister of Koenigswinter                                   |
| Mr SCHWONTZE  | Head of the Eitorf Forstamt, which is responsible for the Siebengebirge |
| Mr MENSE      | VVS forest warden   |

The meeting was held in a room in the Koenigswinter town hall. We took the opportunity to admire an exhibition in the town hall foyer on the reserve's forest biology, much of which had been put together by Mr MENSE.

The Siebengebirge museum, opposite the town hall, explains the history of the reserve and presents some of the area's significant features. We were able to see photographs of the firestone quarries (Ofenkaulen), which will be discussed later in this report.

Weather conditions were favourable throughout my visit, allowing access to all those parts of the site we had planned to inspect.

On all my visits to the various parts of the reserve, Mr SCHWONTZE was my guide; we were generally accompanied by Mr FASSBINDER, Mr SECHTEM and Mr MENSE.

I would like to thank all these people for their warm welcome, friendliness and willingness to help.

### 3. MAIN FEATURES OF THE DIPLOMA AREA

#### 3.1 Geographical location

Located on the right bank of the Rhine south-west of Bonn, the Siebengebirge is the northernmost point of the Westerwald massif.

The massif runs from east to west, forming a transition between the Westerwald and the Eifel. Lying at the boundary between the middle and lower Rhine, it is the first mountain spur in the northern Rhine plain.

Facing Bad-Godesberg (the southern suburbs of Bonn), the Siebengebirge rises from the banks of the Rhine (52 m) to the summit of the Oelberg (highest point 460 m).

From an area of 4200 ha when the diploma was awarded in 1971, the Siebengebirge protected area was extended to 4600 ha by a decree of 12 October 1989.

Some of the new parts lie along the A59 motorway, which forms much of the area's western boundary. There has also been a major extension towards Aegidienberg in the east.

Few changes have taken place since then, although it is worth noting the VVS's acquisition of a former tuff quarry at Ofenkaul, which will be discussed later in this report.

#### 3.2 Climate

The climate is continental, with a strong oceanic influence.

The dominant west-south-westerly winds hit the higher reaches of the Siebengebirge, producing precipitation that moves in an easterly direction.

Average rainfall ranges from approximately 680 mm in Koenigswinter to 720 mm at the summit of the Oelberg.

The average temperature is 9°C, with extremes in January and July.

Microclimates generated by the relief and the rock facilitate wine-growing – introduced by the Romans – in the best-situated areas.

#### 3.3 Geology

Continual erosion had initially transformed the whole platform on which the Siebengebirge is now located into a peneplain.

During the tertiary era, the Rhenish schistose massif was raised up; this tectonic movement generated the site.

While most of the massif was being raised, a fissure opened up between the Eifel and the Bergischemland, preparing the way for the future course of the Rhine. Further fissures opened up perpendicular to the main one, giving rise to very significant volcanic activity.

The first eruptions formed tuffs once the ashes had consolidated. Some of these tuffs were covered by lava flows.

This great mantle of volcanic deposits was raised by a second volcanic thrust, forming a whole series of domes, several of which contain trachyte, diorite and basalt columns.

These volcanic thrusts seldom pierced the previous mantle. Erosion quickly exposed the densest rocks.

Those rocks were quarried extensively by human beings, probably even before Roman times; such quarrying was aided by the proximity of the river (conducive to transport) and the regularity of the blocks, and eventually overdeepened the mountain. Some of the quarrying even threatened historic fortified castles such as the Wolkengurg near Drachenfels.

It was as a result of public opposition to this process that the protected area was established.

The region's name is thought to come from the reserve's seven main peaks (sieben – seven), although this etymology is disputed by some. In descending order, they are:

|                 |       |
|-----------------|-------|
| OELBERG         | 460 m |
| LOEWENBERG      | 455 m |
| LOHRBERG        | 432 m |
| NONNENSTROMBERG | 335 m |
| PETERSBERG      | 331 m |
| WOLKENBERG      | 324 m |
| DRACHENFELS     | 321 m |

### 3.4 Vegetation

Owing to its geological diversity, its climate and the considerable differences in exposure according to the relief, the massif is extremely varied; one of the main indicators of that variety is its vegetation.

Forests cover 92% of the reserve's area. The climax wood is beech, supplanted on the warmer, drier slopes by a xerothermic oak-wood with hornbeam and criping fruited service trees. This diversity has been accentuated by human intervention.

Used firstly for intensive forestry and grazing, then for intensive exporting of building materials, the area became Germany's first nature reserve in 1869.

Fierce battles during the last war, the ensuing period of intensive clearing of wood damaged by gunfire and the introduction of spruce in the 19th century have all contributed to a patchwork quilt of climax vegetation.

### 3.5 Reception of the public

As a favourite leisure area in a densely populated region, the Siebengebirge attracts several million visitors a year thanks to its history and the existence of the VVS (Verschönerungs Verein des Siebengebirges).

## 4. CURRENT STATE OF THE SITE

### 4.1 Legal status

The Outline Act of 12 October 1989 established the legal basis for the nature reserve, which is governed by the Nature Conservation Act.

The Outline Act may be broken down as follows:

#### Chapter I Definition of the reserve's protective role

- a) conservation and re-establishment of plant and animal associations and animal and vegetable biotopes;
- b) biological and historical research, and promotion of the site's phyto-sociological and historical significance;
- c) preservation of the site's special, unique beauty.

#### Chapter II Boundaries

This chapter defines the boundaries and area of the site.

#### Chapter III Substance of the Nature Conservation Act.

Chapter IV deals with forest management, particularly the maintenance of isolated patches of old wood until they die, over 10 percent of the area.

NOTE: Among other things, this Act exempts the administrators from liability in respect of risks incurred by users in the event of accidents caused by old stands. This means that visitors are deemed to be aware of the risks they run in entering patches of old wood, and that they therefore cannot claim negligence on the part of the administrator.

### 4.2 Rules governing land

The protected area is divided among five groups of owners:

- |    |                                    |     |
|----|------------------------------------|-----|
| 1) | the state – state forests          | 40% |
| 2) | the VVS – private forests (850ha)  | 20% |
| 3) | municipalities – mainly Bad Honnef | 20% |
| 4) | small forest owners                | 15% |

5) the Federal Republic 5%

#### 4.3 Body responsible for administering the reserve

4.3.1 VVS: Verschönerungs Verein Siebengebirge is the association responsible for promoting and maintaining the reserve.

The reserve was founded as a result of a dispute in the 19th century. The legislature set up the VVS because it needed a legal entity to assign it certain responsibilities and powers.

The VVS owns 850 ha of the forest. The income it receives from the forest, the Oelberg restaurant concession and radio and telephone aerial levies serve to finance some of its public reception facilities.

The association is governed by a board comprising a president, a vice-president and between three and five members.

The board calls on the services of various advisers, some of whom can intervene as of right.

They include:

- the mayors of Cologne and Bonn;
- the head of the Rhein Sig Kreis district;
- a representative of the municipalities of Koenigswinter and Bad Honnef;
- a representative of the forestry department;
- a representative of the honorary members;
- and up to 16 representatives of the members of the VVS (elected for three years).

#### 4.3.1 Eitorf Forstamt

This forestry office directly administers the municipal and state forests in the reserves. It operates under the supervision of the VVS, dealing with day-to-day matters. It proposes a wide range of measures that are easier to implement in the state forests over which it has direct control.

### 5. HIGHLIGHTS OF THE VISIT

A number of problems were addressed during the visit, including all the points listed in Resolution (96) 25.

#### 5.1 ICE (Inter City Express)

The high-speed train line, which was still in the planning stage at the time of my last visit, is now under construction.

The route selected runs parallel to the A3 motorway, crossing the protected area an average of 50 metres to the west of it.

Most of the track cutting across the protected area is surrounded by tunnels. Thanks to persistent lobbying by the VVS, the length of the tunnels has been extended from the 1000 m initially planned to 1200 m. The structure is completed by a 350-metre casing; in a feat of ecological engineering, this will be covered with excavated materials, then replanted with seeds and plants from the surrounding area.

The most delicate part of the project has been the crossing of the Logebach, achieved by means of a 175 metre-long bridge supported by four pillars.

The bridge's roadway is almost exactly the same height as the nearby motorway.

Special care has been taken to protect the environment at the bottom of this small valley.

The very extensive work undertaken has had little impact on the site's immediate environment.

Seepage waters from the tunnel are collected and put into two decantation basins, so that only clear water is discharged into the Logebach stream.

The decantation basins will be left in place once the site has been dismantled, allowing the creation of additional humid biotopes.

Measures have been taken to offset the loss of certain areas, which will be replaced by areas eight times bigger or the equivalent monetary value.

The project is scheduled to be completed in 2001, and the railway line will be in use from 2002.

VVS and ministry representatives consider that their efforts have minimised the impact of this project, leaving only future pollution from passing trains.

## 5.2 Roads

5.2.1 L331: the main access road to the A3 E35 motorway, with 13 to 16 thousand vehicles per day, a slight increase since my last appraisal. Restricting the number of heavy goods vehicles weighing over 20 tonnes has alleviated the problem slightly, but it is still very serious owing to the physical break in biotope continuity and pollution from vehicle exhausts.

*Change in traffic:* **1985** – 8990 vehicles/day, **1990** – 11260 vehicles/day, **2000** – 16500 vehicles/day, or a doubling of the traffic in 15 years.

5.2.2 L268: Oberdollendorf-Heisterbacherrott link: this is a local road and therefore has less traffic; above all, it has no access to the A3.

*Change in traffic:* **1985** – 7819 vehicles/day, **1990** – 7068 vehicles/day, **2000** – 8800 vehicles/day; the opening to traffic of the B42 has had a positive impact on this road.



5.2.3 L490: Oberkassel-Vinxel link: see comment on the L268.

5.2.4 K8: Ramersdorf-Niederhaltorf

This road carries local traffic, but also contains the A562 interchange built in anticipation of an eastward extension.

Uncertainty about the future development of the Bonn conurbation has left this problem in abeyance.

Contrary to inhabitants' fears, it has not taken long for the city of Bonn to find a new balance; the population has consequently increased, despite the shift of all government bodies to Berlin.

Housing is in great demand, particularly in the immediate vicinity of the protected area.

Increased transit traffic is therefore to be feared on existing roads, and continued work on the A562 extension may eventually be proposed.

Nobody was able to give me further information about this. If the extension is completed, it must not affect the reserve, so it is important to be particularly vigilant from now on.

5.2.5 Conclusions: Traffic is, and will continue to be, a major problem in the reserve. Some of the main roads carry increasingly heavy traffic, with similar increases in the resultant pollution.

As Bonn continues to grow and to develop economically, it is essential that damage to any part of the protected area by any kind of infrastructure is not tolerated.

No realignment or extension work has been undertaken as yet.

### 5.3 Petersberg

This complex, built by the former owners of the perfumery that created eau-de-Cologne, was converted into a residence for VIP guests of the Federal Republic, necessitating the construction of a heliport and security installations along the access road.

Since the supreme federal authorities were transferred to Berlin, this complex – with annual operational costs totalling 4 million DM – has been used as a hotel, subject to a requirement that it receive the government's VIP guests.

As the complex is not economically viable without federal assistance, it is important to pay close attention to the various solutions that may be envisaged.

The heliport is scarcely used any more, except for security manoeuvres.

Petersberg lies at the centre of a federal forest administered by federal wardens. It is subject to the same administrative regulations as other forests.

A stand of old wood forms the western boundary of the hotel area. Until now, those in charge have had little hesitation about cutting down a few trees to preserve views; however, I feel that such a practice is inconsistent with this level of protection.

## 6. FORESTRY MANAGEMENT

### 6.1 Brief historical background

Until the early 19th century, the forests – which were highly fragmented – were all subject to pollarding on a 15- to 18-year rota basis. This enabled foresters to meet the high demand for firewood, charcoal and tanbark, as well as providing food and bedding for animals.

At the beginning of the 20th century, the authorities began to convert the reserve into high forest. The better stands were left to age, while lower-quality trees were felled and spruce planted on the areas thus cleared.

The proportion of spruce trees continued to increase, covering 45 percent of the area by 1950.

The need to clear large quantities of wood damaged by gunfire during the fighting in 1945 enabled the administrators to accommodate a desire to revert to an oak- and beech-based climax forest.

This new policy was formally set out in a document entitled “Naturschutz und Landschaftspflege im Siebengebirge” (Nature Conservation and Landscape Protection in the Siebengebirge), produced by the Rhineland Forestry Directorate (HFB).

The policy advocated the following measures:

- 1) establishing, maintaining and protecting ecologically stable forest stands;
- 2) ensuring the long-term preservation and protection of old broadleaved stands;
- 3) increasing the proportion of broadleaved species to 75 percent;
- 4) preserving and reintroducing rare broadleaved species such as criped fruiting service trees, sorb trees, medlar trees and other wild fruit trees;
- 5) making provision for the forest's landscaping role;
- 6) rapidly converting stands damaged by gunfire, and restricting clear-felling;
- 7) maintaining pollarding in a few areas for educational purposes;
- 8) leaving some trees standing until their natural deaths;
- 9) limiting the number of tracks, bridle paths and tourist paths;
- 10) protecting and maintaining rare species and biotopes;
- 11) encouraging and preserving the forest's recreational function without jeopardising the protection of species and biotopes.

## 6.2 Achievements and recent developments

Management plans for state and municipal forests have implemented most of these policy guidelines. On our previous visit, we had inspected the old-wood sites currently being monitored by the LÖLF1 (Petersberg and Nonnenstromberg) and Bonn University (Prof. Schumacher).

Following the 1991 resolution, the principle of planting coniferous trees was completely abandoned; assisted natural regeneration has become the normal management method for broadleaved stands. The only major drawback is that a population of deer has grown up in the Bad Honnef municipal forest.

Thanks to the 1996 resolution, the administrator was able to encourage the municipality to place the hunting ground at the southern end of the protected area under its control. The hunting ground shares a boundary with the adjoining Land, which tolerates deer and makes little effort to prevent their geographical expansion.

The measures taken under this system have slowed the proliferation of these ruminants without reducing their numbers. Official contact should be made with the adjoining Land so that consideration can be given to the various problems faced, and appropriate solutions found.

The sites subject to coppicing and pollarding have not been extended since our second-to-last appraisal; it is essential to preserve this aspect of old forestry techniques. As we have already pointed out, this technique should be applied to larger areas so that even the uninitiated can appreciate it.

The old broadleaved stands are complemented by a network of trees at a density of five to 10 per hectare. These trees are to complete their biological cycle, introducing considerable biodiversity to the reproducing forest.

During our visit, we had access to a dry biotope restoration site on the southern slopes of the Wolkenberg. This restoration should have been undertaken some time ago, thereby avoiding the need for excessive intervention. The development of this area should be monitored.

### Conclusion on this chapter

Most of these developments are to be encouraged. Many positive initiatives have been taken. It is a pity, however, that recommendation no. 6 of the 1996 resolution has not been implemented, although it is not too late to address that issue.

Special note. The current trend is to assign the administration of forest areas to officers, who are responsible either for state forests or for municipal or private forests.

In a reserve such as the Siebengebirge, it is important to retain mixed areas so that the officers responsible for each area have an overview of most of the problems faced; above all, it is important to ascertain the wishes of local communities.

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<sup>1</sup> LÖLF: Landesanstalt für Ökologie, Bodenordnung und Forst.

## 7. RECEPTION OF THE PUBLIC

Reception facilities have had to be set up to cater for the huge number of people visiting and staying in the Siebengebirge. The most significant of these are:

a) Margarethenhöhe

Heavy use of the parking areas in the Margarethenhöhe means that they constantly require work. Signposts and other facilities have been renovated.

b) Grosser Ölberg

This site is directly responsible for the aforementioned parking problem. It attracts large numbers of visitors, and in 1992 a bronze plaque was erected to commemorate the award of the European Diploma.

c) Drachen Burg

Restoration work on this castle is aimed to return it to its original appearance; the castle can be visited.

A museum bringing together all the nature conservation archives is to be opened in the castle's former stables, located at the entrance to the park.

This is a sensible project, since it was in the Siebengebirge that the authorities first recognised the need for nature conservation.

The designers have planned the site as both a museum and a forum for discussion; it should consequently become a living memorial to nature conservation.

The Drachenfels cable-car enhances the site, and no other infrastructure work is required.

d) Security

More security staff have been employed since my last visit; most are retired people with a long-standing commitment to conservation work, selected for their communication skills.

e) Mountain biking

This sport is particularly popular in the Siebengebirge, which is known as the "highest Dutch mountain". At present, mountain biking is authorised only on paths wider than 2 m.

We noted that mountain bikers did not comply with this rule. They use all the paths, disregarding the regulations.

This problem will have to be addressed before it is too late.

## 8. BUILDING OF THE POST OFFICE TOWER

In addition to assessing the 1996 recommendations, I was asked to gather and analyse as much information as possible about this project, and to give an opinion as to its impact on the protected area.

This matter was discussed at a meeting held in Koenigswinter on 27 June 2000, attended by Mr Trommer, head of the Bonn Town Planning Department.

A location had initially been selected on the right bank of the Rhine, on the site of a former cement works. An area near the tower of the former parliament was eventually selected, however, to symbolise Bonn's transition from a capital city to an industrial centre.

An architecture competition was held, and three projects short-listed; the Jahn project was finally selected in late 1996. The project consists of a 150-metre elliptical tower. Surpassing even the most optimistic predictions, the population of the Bonn conurbation is growing more rapidly than before. That growth is generating considerable demand for housing, resulting in increasingly dense urbanisation.

The presence of the Rhine's major river-bed and the listing of the former parliament as an historic building have ensured in-depth analysis of this project.

As the site is located about 10 km from Petersberg, and given that dense urbanisation is reducing the pressure on rural areas, the VVS gave a favourable opinion.

Conclusion: The protected area is not affected by this project; only the visual impact from the Siebengebirge might be viewed as positive, negative or indifferent.

In my opinion, there will be considerable impact during the building phase, which will then diminish over time. The idea of a protected area is not to set in stone everything found both inside and outside that area, but to make a constructive contribution to the discussion process, as has largely been the case in this instance. It is unfortunate that the project was not mentioned in the annual reports.

## 9. AEROPLANE FLIGHTS

The Bonn-Cologne Airport regulations specify approach and take-off corridors as well as the altitudes and timetables with which air transport operators must comply. One of the corridors passes over the southern part of the protected area, following the route of the A3 motorway, then turns west above Bad-Honnef; the altitude over Logebach is 6000 feet.

Since 1999, landings and take-offs have been prohibited between 8pm and 8am. Despite these clearly defined rules, some freight flights take place outside the allowed hours.

The steady increase in traffic is causing considerable disturbance to both inhabited areas and the protected area. Noise pollution and exhaust and kerosene fumes contribute to the bad condition of the forests.

It is essential to ensure strict compliance with the existing regulations by air transport operators.

#### 10. TUFF QUARRY: OFENKAUL

Ofenkaul gets its name from the presence of extensive underground tuff quarries, which continued to be worked well after the reserve had been established. The tuff was used to manufacture bread ovens (ofen), as the stone was heat-resistant, easy to cut and very homogeneous.

This quarrying left a large network of galleries, the entrances to which have been closed up with grills to avoid disturbance to the bats sheltering in them at certain times of year.

The VVS has been able to purchase a two-hectare property opposite the road to Petersberg.

It plans to fit out a small section in one of these mines so that it can be opened to the public in the form of a guided tour. The site can be reached by bus, as there is a regular service that stops at the start of the Petersberg road.

This idea should be supported, as it does not require any infrastructure work and will provide the perfect complement to one of the museum's permanent exhibitions.

#### CONCLUSION

During the two-day appraisal, we established that developments at the Siebengebirge Nature Reserve met the criteria for the European Diploma, in terms of the protection of habitats and species, reception and education of the public and landscape impact.

We therefore propose that the group of specialists renew the award of the European Diploma for a further five-year period, accompanied by the appended recommendations.

|                                |
|--------------------------------|
| <h4>DRAFT RECOMMENDATIONS</h4> |
|--------------------------------|

1. Address the problem of mountain bike traffic by ensuring compliance with existing regulations.
2. Minimise pollution from traffic on all roads crossing the reserve, and inform the secretariat of any potential projects.
3. Continue to exert pressure on the deer herd in co-operation with the adjoining Land.
4. It is essential to establish a continuous succession of sites subject to coppicing and pollarding.
5. Explore the possibility of working with the adjoining Land to harmonise conservation regulations.

## APPENDIX I

## **A P P E N D I X   I I**

### **DRAFT RESOLUTION**

#### **on the renewal of the European Diploma to the Siebengebirge Nature Reserve (Germany)**

The Committee of Ministers, under terms of Article 15.*a.* of the Statute of the Council of Europe,

Having regard to Resolution (65) 6 instituting the European Diploma, as amended by Resolution (98) 29 on the regulations for the European Diploma for protected areas;

Having regard to Resolution (71) 21 on the award of the European Diploma to the Siebengebirge Nature Reserve;

Taking into consideration the experts report as presented at the meeting of the Group of Specialists for the European Diploma on 1 and 2 March 2001;

Having regard to the proposals of the Committee of the Activities of the Council of Europe in the field of Biological and Landscape Diversity (CO-DBP);

Renews the European Diploma awarded to the Siebengebirge Nature Reserve until 21 September 2006;

Makes the renewal subject to the following recommendations:

1. Address the problem of mountain bike traffic by ensuring compliance with existing regulations.
2. Minimise pollution from traffic on all roads crossing the reserve, and inform the secretariat of any potential projects.
3. Continue to exert pressure on the deer herd in co-operation with the adjoining Land.
4. It is essential to establish a continuous succession of sites subject to coppicing and pollarding.
5. Explore the possibility of working with the adjoining Land to harmonise conservation regulations.