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CONVENTION ON THE CONSERVATION OF EUROPEAN WILDLIFE
AND NATURAL HABITATS

GROUP OF SPECIALISTS ON THE EUROPEAN DIPLOMA FOR PROTECTED AREAS

13 March 2015
Strasbourg, Palais de l'Europe, Room 11

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**REPORT ON AN EXCEPTIONAL VISIT TO
PODIJÍ NATIONAL PARK (CZECH REPUBLIC)
AND
THAYATAL NATIONAL PARK (AUSTRIA)
15 – 17 SEPTEMBER 2014**

*Document prepared
by Michael B Usher (United Kingdom)*

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1. INTRODUCTION

1.1. Reason for Visit

The formal request to undertake this on-the-spot appraisal was in a letter from The Secretariat of the Bern Convention dated 9 May 2014. It stated:

Following the decision of the Group of Specialists on the European Diploma of Protected Areas, an exceptional visit must be carried out in 2014 to the above-mentioned areas, in order to: (1) help identifying the possible negative impact on threatened species and habitats, due to the possible construction of large wind turbines park(s) in Northern Austria, (2) assess the management of the hydropower plant Vranov with a view to ensure ecologically bearable flows under Vranov reservoir, Thaya river and Thaya tributaries, and (3) evaluate the harmonisation of the fishing regulations within the two parks. The aim will be to visit the two parks and to discuss the different issues with the relevant stakeholders.

This request came about as a result of the consideration of the annual reports of the Thayatal National Park (Austria) and the Podyjí National Park (Czech Republic) by the Group of Specialists' meeting in Strasbourg on 24 March 2014. The draft report of that meeting, copied verbatim from paper T-PVS/DE(2014)11E, is included in Annex 1.

During the on-the-spot visit, meetings were arranged to discuss these issues in both Podyjí and Thayatal National Parks. The meetings included park staff, local experts and stakeholders, and were concluded with a meeting with the two National Park Directors – Ludwig Schleritzko (Thayatal) and Tomáš Rothröckl (Podyjí). An outline of these meetings is given in Annex 2.

In undertaking this mission I was accompanied by Tatiana State Masson, the person responsible for the European Diploma for Protected Areas at the Secretariat of the Berne Convention.

1.2. Thayatal National Park

Thayatal is a small national park, extending to 1330 ha, and was established on 1 January 2000. It is predominantly mixed deciduous woodland which has developed on a rolling terrain. The national park is centred on Hardegg, from where the valley of the River Fugnitz flows from a plateau of agricultural (arable) land, which lies in an approximately southerly direction. In an approximately north easterly direction the boundary of the national park, and also the national boundary with the Czech Republic, is the River Thaya (named the River Dyje in the Czech Republic). The linear distance of the national park boundary between Austria and the Czech Republic is only slightly over 11 km. However, the actual boundary is approximately 26 km in length, due to the meandering nature of the river in its deep valley. This riverine part of the Thayatal National Park consists of steep, wooded slopes, with small cliffs in places, and some small areas of grassland on flat alluvial areas beside the river.

1.3. Podyjí National Park

Podyjí is a considerably larger national park, extending to approximately 6,300 ha. In the west its boundary is at Vranov nad Dyjí, with a buffer zone extending to the Vranov Dam. In the east its boundary is in the outskirts of Znojmo and the Znojmo Dam. The national park is largely composed of deciduous woodland on a rolling plateau at around 370 to 480 m altitude, with the highest point at 536 m and the lowest, at the Znojmo Dam, at 207 m. That part of the national park close to the Rive Dyje is composed of steep, wooded slopes, rather frequent small cliffs and rocky outcrops, and occasional small areas of grassland beside the river. Three small tributaries (or creeks) enter the River Dyje from the national park – these are, from west to east, Klaperův potok (potok ≡ creek), Lukovský potok and Žlebský potok. An extensive buffer zone encompasses several small villages situated near the formal national park boundary, as well as considerable areas of vineyards to the south-east from the Austrian border near Hnanice to Znojmo.

2. WIND FARM DEVELOPMENT

2.1. Background

An investigation in northern Austria identified blocks of forest which might be suitable for development as wind farms (or wind parks) (known as “Windpark Nord”). The plans were made public in the autumn of 2012. The administrations of both the Thayatal and Podyjí National Parks expressed their concerns about the effects of the wind farm development on both the landscape character and the natural heritage of the area. A major concern was Block WA18, a forest block situated about 7 km south west of Hardegg and visible from Vranov. Other forest blocks which formed part of the 2012 plans were situated further away from Thayatal National Park. These included the two sections of Block WA19 and Block WA21 (both about 12.5 km south-south-west of Hardegg), and Blocks WA20 and WA22 (both about 17 km south-south-west of Hardegg). All other blocks for potential wind farm development are situated further away from Hardegg.

The citizens in many municipalities in Austria, and some in the Czech Republic, expressed their opposition to the plans. As a result, and on the basis of detailed economic, scientific and sociological analyses, the Provincial Government of Lower Austria abandoned the plans; preparatory work on the development of “Windpark Nord” was terminated in the autumn of 2013.

2.2. Findings and Analysis

During the on-the-spot appraisal several opinions were expressed about the damage to the landscape character of the area if the wind farm development had proceeded. There is apparently no detailed analysis of the landscape character (*sensu* Hughes & Buchan, 1999) of this area, although I am informed about an internal 2008 document of the Municipal Authority of Znojmo entitled (in translation) Znojmo Region – Preventive Landscape Character Assessment. This could form the basis of a wider study, especially because particularly strong views were expressed in relation to the landscape surrounding the historic town of Vranov nad Dyjí and its castle.

There are, however, good data about the birds. For any such development there is a requirement in Austria that the bird life should be studied for at least one year. For Block WA18 there was concern about three species – black stork (*Ciconia nigra*), white-tailed eagle (*Haliaeetus albicilla*) and hen harrier (*Circus cyaneus*). There are no actual data on the bats, though it is known that 22 of the 28 species which occur in Austria are recorded from the Thayatal National Park (and all bat species are included on annexes of the European Union’s Habitats Directive). It is thought that wind farms tend to attract bats, and hence that strikes with bats are likely to occur.

For the southern part of Block WA19, there are no observations of endangered bird species, though it is probably within 5km of a white-tailed eagle’s nest. This small area could therefore be described as ‘data deficient’. In the northern part of Block WA19 there are apparently no ornithological problems; the same is apparently true for Block WA21. It appears that there are no migration corridors for birds through the area of planned wind farm development, just broad movements. The only known migration corridor is along the river valley, within the two national parks. The migration routes for deer and wild boar apparently do not cross the area of the planned wind farm development.

Economically, these forest blocks are generally too small to attract investment because insufficient numbers of turbines (windmills) could be erected. There appear to be no current wind farm developments planned on the Czech side of the international border.

2.3. Recommendations

As the plans for the wind farm development have now been abandoned, there can be no recommendations concerning the Windpark Nord project. However, three general recommendations can be made for action by the national, regional or local authorities, working together with the two National Park authorities.

R1: In any wind farm development, planned in the vicinity (i.e. within 12 to 15km) of either the Thayatal National Park or the Podyjí National Park, ornithological data, collected over a period of at least one year, must be obtained. Other data, for example on bat activity and bird/mammal migration

routes, should also be collected by appropriate stakeholders, co-ordinated by the national park authorities. All data should be made publically available for scrutiny in an Environmental Impact Assessment of the proposed development.

R2: Given the importance of landscape in the border country between Austria and the Czech Republic, when funds become available (from regional or local authorities) it would be beneficial to carry out a 'landscape character assessment', not just of the two national parks and their buffer zones but also of the land which surrounds the national parks.

R3: All authorities should use the guidance in the Bern Convention's paper Wind Farms and Birds: an updated analysis of the effects of wind farms on birds, and best practice guidance on integrated planning and impact assessment (paper T-PVS/Inf (2013) 15). It would be appropriate for the Secretariat of the Bern Convention to prepare and publish similar guidance on Wind Farms and Bats.

3. THE RIVER DYJE/THAYA

3.1. Background

Prior to the building of the Vranov Dam in 1935, the River Thaya at Hardegg was a popular place for bathing, and hence Hardegg was a focus for the tourist trade. This changed for two reasons once the dam had been built and the hydroelectric plant was in operation. First, the flows of water in the river became very variable, depending on whether one, two or three turbines were in operation. Second, the summer temperature of the water dropped very considerably because water for the turbines was extracted from near the base of the reservoir behind the dam rather than from the warmer surface waters.

The effect was not only felt by the tourist trade. The changed temperature regime, and the violent oscillations in the flow, have meant that the ecology of the river has been markedly changed. It is these ecological changes which have had influences on the two national parks, and hence the on-going discussions between the Podyjí National Park and the operators of the Vranov Dam, E.ON Trend s.r.o.

3.2. Findings and Analysis

The Vranov Dam is situated within the Czech Republic, and hence Czech laws and regulations apply to its operation. In renewing the European Diploma for Podyjí National Park, the first recommendation was

"To ensure, in collaboration with the operator of the hydroelectric power station at Vranov, that the negative amplitudes in the flow regime from the dam sluices are reduced and that a minimum residual flow rate is guaranteed".

E.ON has applied to extend its authorisation to utilise the water in the Vranov Hydroelectric Plant (VHP). At the time of the visit, this is being considered by the Water Authority of the Regional Government of the South Moravian Region. Unfortunately, it appears that authorisation can only be extended on the basis of the current position, and hence any changes to the authorisation, or the addition of further conditions, cannot be allowed.

Discussions between the National Park and E.ON have particularly focussed on four topics.

- (1) The operation of three turbines during the peak energy period leads to an unnaturally rapid increase in both the flow rate in the river channel and the depth of the water column, so that the organisms living in the benthos and in the littoral belt are unable to react to these changes sufficiently speedily.
- (2) The peak-period electricity generation causes artificial floods. The drying out and repeated flooding of the littoral belt, and a large part of the periodically exposed river bed, greatly stresses the surviving populations of organisms.
- (3) The periodic exposure and flooding of the river bed also has a demonstrable influence on the state of the floating organic matter, especially the fine fractions.

- (4) The daily variations in flow rates also lead to increased mechanical damage to the riverbank deposits, collapses of the riverbank and similar phenomena.

Mutually acceptable terms of agreement between the National Park and E.ON were finally confirmed on 12 September 2014, immediately prior to the on-the-spot visit. At that time the final version of the agreement was still subject to continuing negotiations.

A considerable amount of data was available during the visit in relation to the flow rate in the river. These data demonstrated the huge variability in the rate of flow from month to month, from day to day, and from hour to hour. For example, taking the 48 hour period from 07.00 on 7 September 2014 to 07.00 on 9 September 2014, approximately one week before the visit, a maximum flow below the dam was $16 \text{ m}^3\text{sec}^{-1}$, and a minimum hourly flow was approximately $2.5 \text{ m}^3\text{sec}^{-1}$. However, only for 3 hours during this period did the flow drop below $3 \text{ m}^3\text{sec}^{-1}$.

Other data presented for the period from 1936 until 2014 showed that at times the flow rate could exceed $70 \text{ m}^3\text{sec}^{-1}$, although such flow rates only occurred exceptionally and at times of flood. However, a flow rate in excess of $40 \text{ m}^3\text{sec}^{-1}$ occurred reasonably frequently.

Each of the turbines in the VHP contributes up to $15 \text{ m}^3\text{sec}^{-1}$ to the flow rate. Hence, if 1, 2 or 3 turbines are in operation, the flow can be increased by 15, 30 or $45 \text{ m}^3\text{sec}^{-1}$. The small hydroelectric plant (SHP) gained building approval in 2012, and this has an authorisation of $2.4 \text{ m}^3\text{sec}^{-1}$, though it is able to perform at a rate about 45% greater than this, and thus the average annual flow rate is approximately $3 \text{ m}^3\text{sec}^{-1}$. Given the operation of the SHP, the flow rate in the river could be set at a minimum of $2.8 \text{ m}^3\text{sec}^{-1}$ between mid-May and mid-October, and at a minimum of at least $3.3 \text{ m}^3\text{sec}^{-1}$ for the other 7 months of the year.

There are, however, constraints on the amount of water that can be extracted from the reservoir and allowed to flow through the turbines of the Vranov Dam. There is a defined minimum quantity of water which has to be retained within the reservoir for uses other than the generation of electricity. These uses are primarily for the extraction of potable water but also for extraction for agricultural use.

The requirements of the Water Framework Directive are also pertinent to the condition of the river. Given the highly controlled nature of the flows in the river below the Vranov Dam, the aim is for the river to have 'good ecological potential'. The river meets the criteria in relation to (1) the chemical composition of the water, i.e. with acceptably low levels of pollutants and (2) the general absence of cyanobacteria (blue-green algae), although these were noted during the visit floating as a scum on a small area of the reservoir behind the Vranov Dam. The river fails to meet the criterion in relation to the biomass of fish, a subject further discussed in section 4.2.

The presence of dead wood, often referred to in the literature as 'coarse woody debris' (CWD), in the river systems of the national parks has considerable ecological benefits. In general a good supply of CWD is seen as desirable as protection for the fish (especially the grayling), as a food for aquatic invertebrates, as a source of nutrients released into the river water, and for a number of physical features of the river's habitat. On the negative side, floating CWD can cause problems at the Znojmo Dam, at the eastern end of the Podyjí National Park, with about 20 m^3 of CWD being removed from the lip of the dam annually (considerably more in years when there are abnormal floods). There are annual surveys along the river to assess the situation. There is a 7-page report, entitled *Dead Wood: Part of the Riverine Landscape*, which analyses the situation in the two national parks.

3.3. Recommendations

The key to the riverine habitat is in the flow of water downstream from the Vranov Dam. The situation has improved in recent years, especially since the operation of the SHP began. However, negotiations are still progressing between the Podyjí National Park authorities and the E.ON Company. A recommendation about river management relates to the well-being of the national parks, and hence needs the support of all stakeholders; it is:

R4: Efforts should continue to be made to bring the river into 'good ecological potential' according to the Water Framework Directive. In achieving this aim the fish population needs to be improved (see section 4 of this report) and the presence of dead wood (coarse woody debris) in the river should continue to be encouraged and monitored.

Two further recommendations for the Czech authorities (governmental, national park, and private) are:

R5: The minimum flow in the river should be set at as great a level as possible. The present minimum levels of $2.8 \text{ m}^3 \text{ sec}^{-1}$ (summer) and $3.3 \text{ m}^3 \text{ sec}^{-1}$ (winter) should be maintained and should become legally enforceable. The flow rate should never be permitted to drop below these minimum rates, except at times of absolute necessity (i.e. during a prolonged drought) which should be on the basis of agreement between the Podyjí National Park, the E.ON Company and the relevant agencies of national, regional and local government.

R6: Strong surges of water should be avoided as far as is possible and consistent with the safe operation of the VHP. Instead of sharp peaks in the flow rate, every effort should be made by the operators of the Vranov Dam to flatten out the peaks by more gradual build up to larger flow rates. Except at times of flood, it is preferable not to have three turbines operating simultaneously at full capacity.

4. FISHING IN THE RIVER

4.1. Background

Fishing has been a difficult issue because of different regulations and different approaches on the two sides of the national boundary. It had been further complicated by the construction of the massive Vranov Dam, and also by the construction of the smaller, but still large, Znojmo Dam. The two major impacts on the community of fish in the river have been the change in temperature regime in the river (it became colder during the summer after the construction of the Vranov Dam) and the isolation of this stretch of the river from the water below the Znojmo Dam and that above the Vranov Dam. The river between the two dams has therefore been described as an aquarium!

4.2. Findings and Analysis

The summer decrease in water temperature has affected the community of fish. It has favoured the brown trout (*Salmo trutta*) and has meant that the barbell (*Barbus barbus*), common nase (*Chondrostoma nasus*) and other cyprinid fish species are no longer present. The grayling (*Thymallus thymallus*) occurs rarely, but is sometimes a species which is the target of fishing. If the river had good ecological status it might be expected that there would be about 26 species of fish present. However, currently there are only 5 species, including the two mentioned above and the bullhead (*Cottus gobio*), which is listed in the European Union's Habitats Directive. In 2007 the fish community had a biomass of only about 21 kg ha^{-1} , which is a very low biomass for a river of this nature, though a more recent study indicated 63 kg ha^{-1} . Overall it can be considered as a heavily modified water body.

The assemblage of fish species downstream from the Znojmo Dam is more species rich. For example, both the Barbel (*Barbus barbus*) and the ide or orfe (*Leuciscus idus*) occur, but it is unlikely that they would be able to colonise the river up to the Vranov Dam, even if a fish ladder could be constructed at Znojmo, due to the colder water now flowing from Vranov.

There are multiple reasons contributing to the change in the ecology of the river. These can be summarised as follows. (1) The natural fish community was associated with a river which was warm in summer and cold (often frozen over) in winter, but now the river is comparatively colder in summer and warmer in winter (i.e. not frozen over). (2) There are many migration barriers, the two dams being the major influences but the 9 old weirs, associated historically with water-powered mills, also have an effect. (3) The huge variation in the flow rate of water, over relatively short periods of time, affects the behaviour of the fish. (4) The sediment dynamics have been altered, leading to reduced areas for the fish species to spawn. (5) The importance of the back waters in the tributaries has not been sufficiently recognised as important feeding and breeding grounds for the fish.

The river, between the two dams, has been divided into a number of zones for fishery purposes; in some of the zones fishing is permitted, whilst in other zones no fishing is allowed. In the Czech Republic, running from east to west, zone Dyje 12 runs from the Znojmo Dam for about 4 km westwards and fishing in this zone is prohibited. Zone Dyje 12a then runs to the border with Austria, and is a zone in which fishing is permitted. Zone Dyje 13, which is that section of the river which

borders Austria and the Czech Republic, is complicated, with four sections in which fishing is prohibited and three sections in which fishing is allowed. Finally zone Dyje 14 runs from the border with Austria to the Vranov Dam, and is divided into a short section in which fishing is prohibited and a longer section near to Vranov nad Dyjí in which fishing is allowed. Throughout the river between the two dams only fly fishing is permitted. Five issues were raised in terms of the management of the fish population and the fishery.

First, there is the subject of stocking. It appears that a large number of young brown trout are stocked from the Czech side of the river each year, whilst only a small number of brown trout are stocked from the Austrian side. There is also the problem of the origin of the trout which are stocked. In the Czech Republic, it is more difficult to purchase young trout of known provenance, whilst on the Austrian side there is a definite preference for using trout of Danube rather than Atlantic origin. Coordination of stocking, in terms of numbers, prevention of disease introduction, and provenance, is clearly something for further discussion and agreement. Grayling are sometimes also released into the river.

Second, the licensing arrangements on the two sides of the national border differ. In Austria, responsibility for licenses has been vested in the National Park Authority. In the Czech Republic the Ministry of Agriculture has delegated responsibility for licensing to the Moravian Fishing Association. The number of licenses in Austria has been declining because no new people are allowed to be licensed; currently there are 8 full season licenses and 3 part-season licences in operation. In the Czech Republic there is no such control by the National Park authorities over the number of licences issued.

Third, there is the issue of introducing non-native species for sporting purposes. Historically, both rainbow trout (*Oncorhynchus mykiss*) and brook trout (*Salvelinus fontinalis*) have been introduced. No recent introductions have taken place, although there is some evidence that a few rainbow trout remain in the river. Both fishermen and ecologists agree that neither species should be a component part of the river's fish community.

Fourth, the presence of cormorants since 1995, particularly during the winter, is an issue relating both to the fish stocks in the river and to the implementation of the European Union's Birds Directive. Since the building of the Vranov Dam the river no longer freezes over during the winter, making the fish populations vulnerable to predation by the cormorants. It is considered that the trout, which can hide away, are less exposed to cormorant predation than the grayling, which are generally more obvious.

Fifth, the occurrence of dead wood (coarse woody debris) has already been mentioned. In particular, large pieces of dead wood, close to the river's banks, are excellent places for fish to hide from predators (especially cormorants), as well as encouraging the invertebrates on which the fish feed.

Although there is a relative wealth of data about the river and its fish community, more research, and compilation and analysis of these data, needs to be undertaken. Thus a research project has been agreed, to be jointly carried out by experts from Austria and the Czech Republic between July 2015 and December 2016. The project has 6 aims, namely:

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| <p>“1) Review all existing studies and discussion how to manage fishery in National-Parks in focus at the transboundary National-Park Podyjí Thayatal in relation to criteria of IUCN and to the general idea of National-Park.</p> <p>2) How does the angling and stocking influence the populations of fishes in the river?</p> <p>3) What is the situation of natural reproduction of fish populations in the river and what are the possibilities to improve it?</p> <p>4) Which bird and mammal species of Podyjí-Thayatal National-Park are sensitive for disturbance? What is the influence of fishery on this sensitive species?</p> <p>5) Where are the most important areas used by sensitive terrestrial species (in comparison with angling ranges and paths) and at which time is the most critical influence on this species?</p> |
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6) Concerning the results of the questions define if and under what conditions angling is possible in national park.”

4.3. Recommendations

Stemming from the management issues and the research described above, five recommendations are:

R7: In the short term, the two National Park administrations should cooperate with each other, and with the fishermen's associations, to agree annual brown trout re-stocking rates, screening of stock prior to release for diseases, and the provenance of the young trout to be released. Agreement should also be reached about whether or not to introduce young grayling. However, in the longer term, it would be beneficial for the naturalness of the river to phase out the re-stocking of any fish species. No further releases of either rainbow trout or brook trout should be permitted between the Vranov Dam and the Znojmo Dam.

R8: Given the close cooperation which exists between the administrations of the two National Parks, there would be considerable benefits if the Czech Ministry of Agriculture delegated the responsibility for licenses to the Podyjí National Park administration: this would bring the responsibility for licenses of the Czech side of the river into line with the Austrian side, where the responsibility rests with the Thayatal National Park administration.

R9: The sections of fishing zones Dyje 12, 13 and 14 should be reconsidered by the Czech authorities. There would be considerable benefits for the two National Parks if fishing could be progressively phased out in zone Dyje 13 (the zone along the border between Austria and the Czech Republic).

R10: The fish stocks in the river need to be periodically monitored by the national park authorities in cooperation with appropriate stakeholders. Management of the fish stocks can then be agreed on the basis of evidence gathered during monitoring. The results of all monitoring and research, irrespective of who funded it, should be made publically available so that the data are used for the benefit of all stakeholders.

R11: Action should be taken by the appropriate Austrian and Czech authorities either to remove all obstructions or to create bypasses so that the movement of fish throughout the river between the Vranov Dam and the Znojmo Dam is assured. Thought should also be given to the environmental benefits of building a fish ladder linking the Vranov-Znojmo section of the river with its reaches downstream below Znojmo.

5. CONCLUSIONS

5.1. Two additional suggestions

During the visit, the tremendously close cooperation between the two national parks was noted. Cooperation was occurring on all levels, from the most senior to the junior. There are agreements on cooperation and the exchange of data. There are regular meetings, joint projects, and an advisory board with official representation from both countries. Mention was made of the 'twinning agreement' which had been arranged between two other adjoining European Diploma for Protected Areas sites (Vanoise National Park in France and Gran Paradiso National Park in Italy). Given the existing very close ties, it was suggested that the Podyjí and Thayatal National Parks might wish to explore a similar twinning agreement with the Council of Europe.

During the visit rather little signage relating to the European Diploma was evident. There was evidence in Austria of the EDPA logo on publications and at the entrance to the national park. We were given an interesting little booklet entitled *European Diploma of the Council of Europe for Protected Areas of the Czech Republic* which describes the three Diploma areas in that country. However, we concluded that more prominence could be given to the Diploma in both of the national parks.

5.2 Final comments and conclusions

In concluding this report, I should like to thank the staff of both the Thayatal and Podyjí National Parks for their assistance, hospitality, and for making arrangements for me to meet with such a wide spectrum of stakeholders. The huge input from national park staff, and from the other people whom I met, is greatly appreciated.

The most striking impression of the visit is the close cooperation between the two national park authorities. This has obviously assisted the integration of management between Thayatal and Podyjí National Parks, and is manifest, for example, in the maps which show access trails, etc., of both parks. This is a very commendable example of what can be achieved with two protected areas working together to form a trans-national entity for the greater protection of nature and benefit of both local people and visitors.

Whilst one of the initial reasons for the visit, the wind farm development, had been cancelled before the visit had taken place, aspects of the river management and of the fisheries have been discussed. Eleven recommendations (listed in Annex 3) have been made which, I hope, will assist the two national park authorities. Whilst they, as well as the Secretariat of the Bern Convention, have had an opportunity to comment on a draft of this report, the contents of this report reflect my own assessments, and any errors are solely my responsibility.

Reference

Hughes, R. and Buchan, N. (1999). The landscape character assessment of Scotland. Pp 1 – 12, in *Landscape Character: Perspectives on Management and Change*, ed. by M. B. Usher. The Stationery Office, Edinburgh.

Annex 1: Extract from the draft report of the Group of Specialists' meeting in Strasbourg on 24 March 2014, paper T-PVS/DE(2014)11E

The Podyjí National Park (Czech Republic) informed that the management plan for the period 2010-2019 was already adopted (recommendation 2) and its implementation is in progress.

The Secretariat of the Bern Convention has been informed about the development plans of the Austrian Federal Forests aiming at the construction of a large wind turbines park in Northern Austria in the close vicinity of two National Parks Thayatal (Austria) and Podyjí (Czech Republic).

The Group appreciated that the management plan for 2010-2019 was already adopted and that its implementation is in progress. It also greeted the efforts of the working group to reduce the negative impacts on the nature, caused by fishery on the Czech side of the Dyje River.

The Group decided to keep under observation the progress on the negotiations with the owner of hydropower plant Vranov, started in order to ensure ecologically bearable flows under Vranov reservoir (recommendation 1). Additionally, it decided to follow the co-operation with the Thayatal National Park to harmonise the fishing regulations within the two parks (recommendation 4).

The Group further instructed the Secretariat to organise an exceptional visit of an expert to both the Podyji National Park and the bordering Thayatal National Park, in the frame of Article 8 of the Resolution CM/ResDip(2008)1, in order to help identifying the possible negative impact on threatened species and habitats, due to the possible construction of large wind turbines park(s) in Northern Austria, and in addition to evaluate the issue on the fishing regulations within the two parks and the management of the Vranov dam.

The Thayatal National Park (Austria) wrongly referred to the progress made on the implementation of the recommendations of the old Resolution CM/ResDip(2008)5. Hopefully, the two Resolutions attach identical recommendations to the renewal of the European Diploma, so the 2013 annual report is not meaningless.

The Secretariat of the Bern Convention has been informed about the development plans of the Austrian Federal Forests aiming at the construction of a large wind turbines park in Northern Austria in the close vicinity of two National Parks Thayatal (Austria) and Podyji (Czech Republic).

The Group appreciated the co-operation between the two parks in the framework of common goals and incited them to go forward and undertake to translate into action the proposed measures of the study on the ecology of the Thaya River and how it is affected by the Vranov Dam operations (recommendation 1).

The Group instructed the Secretariat to organise an exceptional visit of an expert to both Thayatal National Park and the bordering Podyji National Park, in the frame of Article 8 of the Resolution CM/ResDip(2008)1, in order to help identifying the possible negative impact on threatened species and habitats, due to the possible construction of large wind turbines park(s) in Northern Austria, and in addition to evaluate the issue on the fishing regulations within the two parks and the management of the Vranov dam.

Annex 2: Programme of the Visit

Sunday, 14th September

Evening – arrive at hotel in Hnanice (Czech Republic)

Monday, 15th September: NP Podyjí

- 8.30 Transport from hotel to Forest Management HQ, Podmolí
- 9.15 - 9.45 Meeting with NP Podyjí management and presentation of NP Podyjí
- 10.00 - 11.00 Meeting with experts and stakeholders:
Mgr. David Grossmann, Podyjí National Park Administration
Mgr. Miroslava Janíčková, Member of Podyjí National Park Council, Vranov Chateau castellan
Ing. Milan Pořízka, Forestry management, Podyjí National Park Administration
Mgr. Lenka Reiterová, Podyjí National Park Administration
Ing. Tomáš Rothröckl, Podyjí National Park Administration
Jiří Ryšavý, Hotelier, Active member of Vranov nad Dyjí Community
Ing. Dušan Utinek, PhD., Representative of Ministry of Environment
Doc. Dr. Ing. Tomáš Vrška, Chair of Podyjí National Park Council, Forestry expert
Mgr. Bc. Jana Čtveráčková, Interpreter

Comment: The first part of the morning session focused on the habitats and environment of the National Park, as well as on its species richness. Unfortunately many of the potential stakeholders were unable to attend the meeting. However, what was stressed was the landscape value of the National Park and the surrounding area, both in Austria and the Czech Republic. Tourism is important, especially for Vranov, and this includes recreational fishing.

- 11.00 - 12.00 Short hike into the national park
- 12.00 - 13.30 Lunch and transport to Vranov nad Dyjí
- 13.30 - 15.00 Meeting with experts – river Dyje water management, Vranov Castle:
Ing. Michal Boušek, Water and Forest Management Department, South Moravian Region Authority
Mgr. Jan Dušek, Beleco, expert water management, fish management
Ing. Roman Gric, Povodí Moravy (the Water Management Company)
Mgr. David Grossmann, Podyjí National Park Administration
MSc. Kateřina Hroudová, Ministry of Environment, Water Protection Department
Ing. Martina Kosová, Podyjí National Park Administration
Petr Kristek, EON Company
Ing. Jiří Musil Ph.D., T. G. Masaryk Water Research Institute, expert
Ing. Pavel Neruda, Czech Hydrometeorological Institute, expert
Ing. Josef Nistler, Government Commissioner for Border Waters, Ministry of Environment
Mgr. Lenka Reiterová, Podyjí National Park Administration
Ing. Tomáš Rothröckl, Podyjí National Park Administration
Ing. Mgr. Pavel Tollner, Povodí Moravy (the Water Management Company)
Ing. Dušan Utinek, PhD., Representative of Ministry of Environment
Milan Vácha, EON Company
Ing. Marek Viskot, Povodí Moravy (the Water Management Company)
Doc. Dr. Ing. Tomáš Vrška, Chair of Podyjí National Park Council
Ing. Josef Žák, Ministry of Environment, Regional representative
Mgr. Bc. Jana Čtveráčková, Interpreter

Comment: The discussions ranged widely over the operation of the Vranov hydroelectric plants, which were designed to produce electricity at periods of peak demand, and the flow rates which can be achieved using the various generating equipment. The minimum flow rates were described. The nature of fishing – fly fishing which is uncommon in the Czech Republic – and the species of fish mentioned.

15.15 – 17.30 Vranov Dam and water power plant excursion

Tuesday, 16th September: NPs Podyjí and Thayatal

08.30 Transport from hotel, with short visit to River Dyje valley and disused weir

10.00 - 11.30 Meeting with experts – fishery management, Čížov Visitor’s centre:
Prof RNDr. Vladimír Bejček CSc, Czech University of Life Sciences Prague, expert
Mgr. Jan Dušek, Beleco, expert – water management, fish management
Ing. Vladimír Gall, Ministry of Agriculture, Forest, Hunting and Fishery Department
Mgr. David Grossmann, Podyjí National Park Administration
Ing. Václav Habán, Moravian Fishing Association
Ing. Jiří Musil Ph.D., T. G. Masaryk Water Research Institute, expert
Ing. Pavel Neruda, Czech Hydrometeorological Institute, expert
Mgr. Lenka Reiterová, Podyjí National Park Administration
Ing. Tomáš Rothröckl, Podyjí National Park Administration
Ing. Dušan Utinek, PhD., Representative of Ministry of Environment
Mgr. Martin Valášek, Podyjí National Park Administration
Doc. Dr. Ing. Tomáš Vrška, Chair of Podyjí National Park Council
Ing. Josef Žák, Ministry of Environment Regional representative
Ing. Martin Žižka Ph.D., Ministry of Agriculture
Mgr. Bc. Jana Čtveráčková, Interpreter

Comment: The main fish species is the brown trout (*Salmo trutta*), although there is also interest in the grayling. The fishing zones were described, as were the various laws relating to fishing within the Czech Republic. Various other topics were raised, including natural reproduction of the trout, annual restocking, the impact of predators, rainbow trout, and the need for research.

11.30 - 12.30 Visit to the Thaya Valley and short transboundary hike

12.30 - 14.00 Transport to National Park Headquarters, Hardegg, and lunch

14.00 - 15.30 Presentation on the Thayatal Management Plan, fishery and water issues and ‘silent zones’
DI Ludwig Schleritzko, Director of the Thayatal National Park
Christian Übl, Biologist and Visitor Manager, Thayatal National Park

15.30 - 16.00 Meeting with **Mag. Heribert Donnerbauer**, Mayor of Hardegg

Comment: During the earlier part of the afternoon the discussion focused on Thayatal National Park’s relationships with the three main topics to be explored – wind farm development, the ecology of the River Thaya, and fishing. The mayor joined the discussions, emphasizing the local community’s opposition to the wind farm and support for the National Park.

16.00 - 17.00 Excursion to Thayatal National Park (“silent” zones, artificial spawning grounds for trout, situation of fishery, measures to improve the ecological situation of the fish-fauna in the river)

17.00 - 18.00 Excursion to the area of Windpark Nord (Zone 18) and Windpark Zone 19

Wednesday, 17th September: NP Thayatal

- 8.30 Transport from hotel to National Park Thayatal, Hardegg
- 09.00-11.30 Meeting with fisheries and river experts and stakeholders:
Reinhard Bentz, Advisory Board, Fishery
Dr. Gerhard Käfel, Government of Lower Austria, Water Economy Member of Czech and Austrian Water-Borderline Commission Working Group
DI Gottfried Pausch, Fishing District Association, Korneuburg
DI Harald Pölzl, Fishery Committee of Advisory Board
DI Ludwig Schleritzko, Director of the Thayatal National Park
Oskar Schotz, Fisherman, Hardegg
Christian Übl, Biologist and Visitor Manager, Thayatal National Park
Selina Siller, Interpreter

Comment: This meeting explored the problems faced by fish in the river, as well as the requirements of the European Union's Water Framework Directive. The importance of the tributaries as spawning grounds, of fish ladders to bypass obstructions, of the flow rates and lack of winter freezing, and of predators were all explored.

- 11.30-13.00 Meeting with ornithological experts
DI Manuel Denner, BirdLife Österreich – ARGE Weinviertel
Mag. Martin Pollheimer, Coop Natura, Ornithology
DI Ludwig Schleritzko, Director of the Thayatal National Park
Christian Übl, Biologist and Visitor Manager, Thayatal National Park

Comment: The work of ornithological groups in relation to wind farm development was described – three categories are 'red areas' where they consider that wind farms should not be built, 'yellow areas' where there may be problems, and 'white areas' where there are no concerns. The discussion explored the categories of the various blocks in the previously planned development and the species of birds involved. There was also a discussion about bats and wind farms.

- 13.00-14.00 Lunch
- 14.00-15.30 Meeting with the Directors of both National Parks
Ing. Tomáš Rothröckl, Director of Podyjí National Park
DI Ludwig Schleritzko, Director of the Thayatal National Park

Comment: This provided an opportunity to explore the topics discussed during the previous days, and to explore possible topics for the report to the Council of Europe's Group of Specialists on the European Diploma for Protected Areas.

Annex 3: List of the recommendations

This annex lists the 11 recommendations included within the report.

Recommendations about wind farm development

R1: In any wind farm development, planned in the vicinity (i.e. within 12 to 15km) of either the Thayatal National Park or the Podyjí National Park, ornithological data, collected over a period of at least one year, must be obtained. Other data, for example on bat activity and bird/mammal migration routes, should also be collected by appropriate stakeholders, co-ordinated by the national park authorities. All data should be made publically available for scrutiny in an Environmental Impact Assessment of the proposed development.

R2: Given the importance of landscape in the border country between Austria and the Czech Republic, when funds become available (from regional or local authorities) it would be beneficial to carry out a 'landscape character assessment', not just of the two national parks and their buffer zones but also of the land which surrounds the national parks.

R3: All authorities should use the guidance in the Bern Convention's paper *Wind Farms and Birds: an updated analysis of the effects of wind farms on birds, and best practice guidance on integrated planning and impact assessment* (paper T-PVS/Inf (2013) 15). It would be appropriate for the Secretariat of the Bern Convention to prepare and publish similar guidance on *Wind Farms and Bats*.

Recommendations about the River Thaya/Dyje

R4: Efforts should continue to be made to bring the river into 'good ecological potential' according to the Water Framework Directive. In achieving this aim the fish population needs to be improved (see section 4 of this report) and the presence of dead wood (coarse woody debris) in the river should continue to be encouraged and monitored.

R5: The minimum flow in the river should be set at as great a level as possible. The present minimum levels of $2.8 \text{ m}^3 \text{ sec}^{-1}$ (summer) and $3.3 \text{ m}^3 \text{ sec}^{-1}$ (winter) should be maintained and should become legally enforceable. The flow rate should never be permitted to drop below these minimum rates, except at times of absolute necessity (i.e. during a prolonged drought) which should be on the basis of agreement between the Podyjí National Park, the E.ON Company and the relevant agencies of national, regional and local government.

R6: Strong surges of water should be avoided as far as is possible and consistent with the safe operation of the VHP. Instead of sharp peaks in the flow rate, every effort should be made by the operators of the Vranov Dam to flatten out the peaks by more gradual build up to larger flow rates. Except at times of flood, it is preferable not to have three turbines operating simultaneously at full capacity.

Recommendations about the fish and fishery

R7: In the short term, the two National Park administrations should cooperate with each other, and with the fishermen's associations, to agree annual brown trout re-stocking rates, screening of stock prior to release for diseases, and the provenance of the young trout to be released. Agreement should also be reached about whether or not to introduce young grayling. However, in the longer term, it would be beneficial for the naturalness of the river to phase out the re-stocking of any fish species. No further releases of either rainbow trout or brook trout should be permitted between the Vranov Dam and the Znojmo Dam.

R8: Given the close cooperation which exists between the administrations of the two National Parks, there would be considerable benefits if the Czech Ministry of Agriculture delegated the responsibility for licenses to the Podyjí National Park administration: this would bring the responsibility for licenses of the Czech side of the river into line with the Austrian side, where the responsibility rests with the Thayatal National Park administration.

R9: The sections of fishing zones Dyje 12, 13 and 14 should be reconsidered by the Czech authorities. There would be considerable benefits for the two National Parks if fishing could be progressively phased out in zone Dyje 13 (the zone along the border between Austria and the Czech Republic).

R10: The fish stocks in the river need to be periodically monitored by the national park authorities in cooperation with appropriate stakeholders. Management of the fish stocks can then be agreed on the basis of evidence gathered during monitoring. The results of all monitoring and research, irrespective of who funded it, should be made publically available so that the data are used for the benefit of all stakeholders.

R11: Action should be taken by the appropriate Austrian and Czech authorities either to remove all obstructions or to create bypasses so that the movement of fish throughout the river between the Vranov Dam and the Znojmo Dam is assured. Thought should also be given to the environmental benefits of building a fish ladder linking the Vranov-Znojmo section of the river with its reaches downstream below Znojmo.