



**Municipality of Banská  
Štiavnica  
&  
Ecological Tourism in Europe  
GERMANY**

**PROMOTING  
SUSTAINABLE TOURISM  
IN CENTRAL AND EASTERN  
EUROPE**

**A DEMONSTRATION MODEL  
APPLIED  
TO THE NATURAL  
AND CULTURAL HERITAGE  
OF BANSKA STIAVNICA  
(SLOVAKIA)**



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Conservation and Nuclear Safety**

**Third Phase  
Final Report and  
Compilation of Documents**

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# **CONTENT REPORT**

*(Ján Roháč)*

## **I. Reports of expert teams**

### **I.1. Tourism team report (ANNEX A)**

The work of the tourism team was focused on further development and specifying of crucial points identified in Phase II Tourism report. Main output of the tourism team contents:

- a) New estimations of the current numbers of tourists are compiled, based on existing visitor data. Methodology of the visitors counting and questionnaires for visitors research are elaborated.
- b) Main groups of visitors are identified and described. The team evaluated the current and potential tourism offer in the town and region, and also selected new visitors groups. The team suggested what should be improved or developed to attract more visitors coming from existing as well as potential visitors groups (market segments).
- c) A comprehensive SWOT analysis was elaborated by the team to give further direction in approaching new or intensifying existing target groups.
- d) The team proposed basics of visitors flow management system to achieve several goals: to make the stay in the town more pleasant for visitors, to increase positive impact and decrease negative impact of visitors flow on local economy and community, and to get visitors also out of the city to nature and landscape.
- e) Neuralgic points as well as all important access points within Banska Stiavnica are identified and described for the purpose of the visitors flow management mentioned above.
- f) The team identified the most critical potential traffic segments and points for achieving a solution for the future traffic management.

Most of the points above were prepared in cooperation with the Biodiversity team. Tourism team participated in or even led also additional project tasks, as mentioned below.

### **I.2. Biodiversity team report (ANNEX B)**

Based on outputs from Ist and IInd phases, the Biodiversity team focused in their work mainly on the particular area of Cervena Studna – the Ottergrund lake. Main goal of their work was to investigate and define real and potential impact of tourism on selected habitats. Their work consist of:

- a) Mapping and categorization of biotopes in the location Cervena Studna – Ottergrund (incl. the geographical identification of borders), resulting in a detailed description of biotopes and presentation of a map (scale 1:1000);
- b) Set of recommendations for the limitation of tourism use at this location, consisting of the identification and ranking of other uses (agriculture, forestry, etc.) and the impact prioritization of tourism use, e.g. skiing, cycling, hiking, etc.;
- c) Reevaluation of the existing Zila Tereza trail with basic proposals for improving the trail for different kinds of uses. Rough calculation of potential trail reconstruction is provided, too.

Most of the points above were elaborated in cooperation with the Tourism team. The Biodiversity team participated also in additional project tasks, as mentioned below.

### **I.3. Principles of tourism development in Banska Stiavnica (MAP IV+V))**

The city and region of Banska Stiavnica has not adopted any strategy for regional development or tourism development. However, such document is inevitable for the sustainable development of the region. The need for such strategies increases, and more and more stakeholders are interested in having a basic development vision and in a strategy on how to meet it.

Our project triggers more intensive preparation of strategic documents in the region. The *Principles of tourism development in Banska Stiavnica*, finalized, re-formulated and adopted by the City Parliament in the project phase III, is the first step of the entire process. The adoption of the above document clearly shows that the local authorities wish to respect the principles of sustainability that lead to a proper development of the town and region. This fact is essential for preparation and implementation of any further tourism development activities, which are connected in some way with the municipal authorities. In addition, these principles show the most suitable approach that the tourism businesses and developers need to follow.

*Principles* were published in local newspapers, publicly commented and discussed with members of the City Parliament. The principles are also published in a separate brochure of A4 format in English and Slovak language.

### **I.4. Criteria for tourism facilities in Banska Stiavnica (ANNEX C)**

One of the outputs of the phase II were *The Draft Criteria for Regional Eco-label*. Based upon the request of the Mayor of Banska Stiavnica, these *Criteria* were reviewed and changed to *Criteria for tourism facilities in Banska Stiavnica*. This request is induced by a repetitive bad publicity of Banska Stiavnica's tourism industry in Slovak and even international media.

There are two purposes for developing the above Criteria:

- to set up a certification/ecolabel system in the town and region;
- to identify facilities, which the Town Office will cooperate with.

The more-or-less pure *environmental* approach in the original criteria was changed to a wider approach of *quality criteria*. This change makes the criteria easier to understand and better acceptable by stakeholders. However, the environment protection is still the strongest element of the criteria's background.

The Criteria were discussed with the main stakeholders in the town. Despite of these consultations, the project team has not decided yet how detailed the criteria should be in order to keep the main stakeholders interested and avoid their demotivation by overloading them with a high number of small and non-realistic requests. Therefore a more general set of criteria was developed. In addition, a more detailed set of criteria was developed for the part of environment protection in order to show how deep such criteria should be in a well developed destination.

### **I.5. Planning of the municipal visitor information center (ANNEX D)**

One of the results of the project phase III is a substantial decision, adopted by the City Parliament, to move the MVIC to a much better location on the Holy Trinity Square. Project team led by architect Mr. Peter Niznansky prepared a plan and design of the new MVIC, outline of the necessary constructional works, and a rough budget estimation for the reconstruction and purchase of equipment. New approaches were implemented, particularly in planning of the *natural and cultural heritage interpretation center* which will be part of the MVIC.

The reconstruction of the MVIC is fully prepared and will be carried out within phase IV, after the summer season is over.



## **I.6. Planning of the Cervena Studna recreational site (ANNEX E)**

The Cervena Studna site is one of the most neuralgic points in the vicinity of Banska Stiavnica. However, local authorities pay almost no attention to this locality. An area plan of possible site development was prepared by a team led by architect Mr. Peter Mravec. The plan proposes recreational and informative functions for the site, while respecting the requirements of nature protection. In addition, German methodologies for recreational site planning were taken into account (and introduced, too).

Planning of the Cervena Studna site consisted of several steps, including workshop of all stakeholders who pursue or may potentially pursue their interests in this site, e.g. nature protectionists, tourism developers, city representatives, water management company representative, members of the City Parliament, Mining Museum representatives, etc. Nature protectionists (the State Nature Protection Agency and management of the Natural Park) continually supervised the planning process.

## **I.7. The Zila Tereza Trail reconstruction (ANNEX F)**

This project task consisted of two parts. First, a set of general principles for trail reconstruction was developed. The most appropriate methods and rules for building, reconstruction, management and design of trails were identified, and adjusted for the natural conditions of Central Europe.

In the second part, a section of the Zila Tereza Trail under Paradajs Mt. was reconstructed. A section which was suitable for a model approach implementation was selected – on a very steep hill high above the town, with spectacular view of the landscape. The physical depreciation of various sub-sections of reconstructed trail will be monitored in order to identify the best options for the trail's constructional design.

## **I.8. Image brochure (ANNEX G)**

A large group of authors, led by editor Jan Rohac sr., worked on the brochure *Banska Stiavnica 7x7*. The aim of the brochure is to attract potential visitors as well as to show local inhabitants the value of the town and region. The brochure consists of brief historical introduction, description of 7 landmarks, 7 attractive tourism sites, 7 stories of Banska Stiavnica, 7 important inhabitants, 7 “wonders” of Banska Stiavnica, 7 traditional recipes, 7 trails and a map. There are drawings and photographs in the book.

The book is layouted and prepared for pre-printing and printing. In addition, it is transformed also into Adobe Acrobat Reader format to be downloadable from internet.

The book is prepared in four languages: Slovak, English, German and Hungarian. Its printing was expected in the project phase IV or V.

## **I.9. Tourism roundtables (ANNEX H)**

The aim of the roundtables is to improve coordination and information exchange among tourism stakeholders in Banska Stiavnica and its region. The roundtables started in phase II and they continued to be organized in phase III (three were held).

During the first roundtable three tourism related projects were presented, and potential problems among them and another stakeholders were clarified.

The second roundtable focused mainly on information exchange among various stakeholders who informed about their activities. Some comments about the summer season were provided (from museum and from information center staff).

The aim of the third roundtable was to inform the members of the local parliament about actual tourism issues in the town and region, to involve them with tourism development and increase their interest in this topic.

A qualitative progress was noticed – thank to better project image some opinion-making private businesses representatives participated in roundtables and some of the members of the local parliament are really involved in tourism development activities.

### **I.10. Educational seminars (ANNEX I)**

A set of 10 educational seminars was organized. Topics of seminars were as follows:

- Tourism - definitions, general descriptions, trends, Slovak circumstances;
- Positive and negative impacts of tourism on the environment;
- Tourism offer of the natural heritage;
- Tourism offer of the cultural heritage;
- What is sustainable tourism;
- Marketing basics of sustainable tourism;
- Vision of Banska Stiavnica development and role of tourism in it;
- Importance of zoning plan for tourism development;
- Tourism certification;
- Introduction to advertising materials preparation;
- Current situation and readiness of Banska Stiavnica for tourism
- Tourism associations.

These topics were lectured by 13 experts. Average number of participants was 15-20. Seminars became popular events visited by professionals as well as by officers and general inhabitants.

### **I.11. Steering Committee**

The original purpose of the *Steering Committee* was to improve the action and operation ability of local stakeholders. It was established at the beginning of phase III, and the members included: Mayor of Banska Stiavnica, director of the Slovak Mining Museum, director of the Natural park, director of Institute of Tourism and director of Amber Trail Association (who is also the project manager).

One meeting of the *Steering Committee* was held. Then its activity ceased and no more meetings were organized during the project phase III. It was clear that the form of such committee is not attractive and motivating for the participants. They are involved in several common activities, they communicate and coordinate activities also without the steering committee. In addition, such body is only one of several similar attempts in the last ten years, and it even harmed the image of the project because the impression of participants was that this project is only another “discussing” type of a project with plenty of meetings and no concrete activities.

However the idea of steering committee should not be abandoned and it should be re-evaluated in phase IV when project will come to implementing of large scale measures.

## **I.12. Study trips (ANNEX J)**

Three study trips were organized:

### *Kacár and Szentendre, Hungary*

The goal of the study trip was to get acquainted with a successful tourist destination in Hungary that is close to Slovakia, to study their way of management and look for possibilities in sharing common market segments. An additional objective of the study trip was to gain experience that would help to prepare a larger study trip for tourism stakeholders from Banská Štiavnica.

### *Kromeriz, Czech Republic*

This study trip was meant for wider public to see how some basic problems and challenges of tourism development could be solved. We selected Kromeriz, Czech republic as a good example that is similar to Banska Stiavnica (UNESCO World Heritage site, in the middle of a Natural Park, .similar size, not very near to high-buying-power markets, etc.).

The trip participants saw some problems of tourism development that are similar to those in Banska Stiavnica, and recognized some basic directions of tourism development and its management in Kromeriz. The most significant learning was connected with structures of tourism management ( such as tourism department of the Municipal Office; the tourism association...).

### *Eiffel and Harz regions, Germany*

The study trip was organized for top representatives of main institutions in the town. It focused on revealing interactions between tourism and nature protection as well as on the sustainable development of natural localities and mining regions.

Each participant of the trip had a chance to learn about his/her particular field of interest but also perceive the interdisciplinary nature of the presented issues. The group from Slovakia benefited from seeing practical examples of dealing with tourism and nature protection problems in Germany. This is mainly because the advantages of (1) linking tourism with nature protection, and (2) implementing local approaches are still not quite understood in Slovakia.

# **A. TOURISM TEAM REPORT**

*(Csilla Dropová, Ján Roháč)*

## **I. Introduction**

This study has been prepared as part of the 3<sup>rd</sup> phase of the project: *Promoting Sustainable Tourism in Central and Eastern Europe. A Demonstration model applied to the Natural and Cultural Heritage of Banská Štiavnica (Slovakia)*. Its content and focus is defined by the project itself. It is not supposed to replace a tourism development strategy, marketing strategy or other types of conceptual documents.

The structure of the study was created based on the needs that were identified during the previous phases of the given project, during which it was discovered that no generally accepted and implemented strategy of tourism development exists in the town and region of Banská Štiavnica. In addition, the data required for its preparation do not exist. In the course of the given project, the expert teams have therefore worked on the missing partial analysis and synthesis that are necessary for developing such strategy. The team members suppose that this strategy will be developed in the near future, and the content of this study (along with the results of the previous stages of the project) will be used for its purpose.

Considering the above reasons, the study has focused mainly on topics that have not been analyzed in the region, have been analyzed only occasionally and with low quality, or are not publicly accessible. The outcomes of the 2<sup>nd</sup> phase are used, while the current study gets deeper into problems and pays more attention to visitors, marketing and visitor flow management. The topics of focus are as follows:

estimating the number of visitors in the town; identifying the existing and possible future market segments (i.e. current and future target groups of visitors); steering the flow of visitors.

## **II. Estimating the numbers of visitors and proposing visitor surveys**

To assure that the town of Banská Štiavnica and its vicinity develop as a tourist destination, it is necessary to estimate the number of visitors that come to Banská Štiavnica throughout a year. Considering that no regular surveys are carried out and no information is collected about the number of visitors, the team will work with the accessible data that were recorded by individual tourist entities in the town and its surroundings.

### **II.1. Estimating the number of visitors based on data from museums**

The Mining Museum in Nature and the Museum in Svätý Anton (St. Anton) are considered to be relevant for this research, and the reasons they were selected are as follows:

1. Both entities are among the most visited museum-type of facilities;
2. Both entities make quite detailed records of the number of their visitors.

In addition, some numbers about the visitors of Banská Štiavnica were acquired also from the Municipal Tourist Information Center (MTIC). However, there are several reasons, such as inappropriate location of the MTIC, low quality of service offered, a lack of visits by tourists who are part of organized groups, that these numbers cannot be considered relevant for estimating the number of visitors in Banská Štiavnica.

Tab.1: Total numbers of visitors in the expositions of the Slovak Mining Museum in 2002 (by Nov. 30, 2002)

	Permanent expositions	Exhibitions	TOTAL
Kammerhof	5 234	1 575	6 809
Berggericht	12 442	2 551	14 993
Old Castle	12 933	10 277	23 210
New Castle	13 839	-	13 839
Mining Museum in Nature	38 391	-	38 391
Gallery	3 510	3 309	6 819
TOTAL	86 349	17 712	104 061

Reference: prepared according to data from the Slovak Mining Museum in Banská Štiavnica

Tab. 2: Tourists visiting the Mining Museum in Nature in 2002

Time period:	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.
Number of visitors	93	1115	5780	11 149	8268	6521	2441	2840	182	38
SPOU	38 427									

Reference: prepared according to data from the Mining Museum in Nature

The Mining Museum in Nature keeps weekly records of visitors, and these records were given to the expert team for the purpose of this project. During a personal meeting, the director of this Museum provided the team with the following information:

approximately 60 % of visitors are participants of both school trips (mainly elementary and high schools) and summer youth camps who come from a distance limited by an approx. 3 hour bus ride. This is also confirmed by the visitors' records, which show that 43 % of the total number of visitors in 2002 came to the Mining Museum in the months of May and June (time of school trips).

The remaining 40 % of visitors can be divided as follows:

- approx. 20 - 25 % – these are tourists coming individually (half of them are domestic, and the remaining half are mainly Russians, Hungarians, Czechs, Dutch, Germans, Austrians);
- approx. 15 - 20 % – these are tourists that come based on co-operation with either accommodation facilities in the surroundings or travel agencies (mainly retired people).

Tab. 3: Tourists visiting the Museum in St. Anton in 2002

Time period:	Adults	Children	Foreigners (adults)	Total
January	101	84	81	266
February	360	308	110	778
March	505	576	183	1 264
April	605	1 229	343	2 177
May	1182	5 042	419	6 643
June	1561	11 527	421	13 509
July	4465	4 113	388	8 966
August	5853	6 932	568	13 353
September	1427	1 255	421	3 103
October	625	1 716	278	2 619

November	300	480	209	989
December	203	107	106	416
<b>TOTAL NUMBERS</b>	<b>17 187</b>	<b>33 369</b>	<b>3 527</b>	<b>54 083</b>
<i>Pupils/students on school trips (included in the total number of visitors)</i>		17 743		

Reference: prepared according to the Record of Annual Admissions to the Museum in St. Anton.

The above table shows the number and structure of visitors in the Museum in St. Anton according to months of the year. The way they classify visitors is a choice made by the Museum employees who monitor people according to admission tickets sold.

Tab. 4: Tourists visiting the Museum in St. Anton in 2000 – 2002

Time period:	2000	2001	2002	%- calculation for 2002
Number of Slovak visitors	43 359	43 216	49 403	91 %
Adults	16 313	15 588	18 043	37 %
Children	27 046	27 628	31 360	63 %
Number of foreign visitors	2 705	3923	3788	7 %
Adults	2 490	3841	3527	93 %
Children	215	82	261	7 %
Free of payment entries	1 499	1435	1221	2 %
Adults	444	339	307	25 %
Children	1 055	837	776	64 %
Foreigners	*	259	138	11 %
<b>Total</b>	<b>47 563</b>	<b>48 574</b>	<b>54 412</b>	<b>100 %</b>
Total of Slovak visitors	* 44 858	44 392	50 486	93 %
Total of foreign visitors	2 705	4 182	3 926	7 %
Total of adult visitors **	19 247	20 027	22 015	40 %
Total of children visitors	28 316	28 547	32 397	60 %
<i>Number of children in groups</i>	<i>18 139</i>	<i>16 192</i>	<i>17 743</i>	<i>32 % (within children: 54%)</i>

Reference: prepared according to the Record of Annual Admissions to the Museum in St. Anton.

\* number is not in the Record of Annual Admissions to the Museum in St. Anton.

\*\* the team included all foreign non-paying visitors in the category of "adults".

Note: The sum numbers of visitors in 2002 differ in tables 3. and 4. This is, however, an insignificant difference of 0,6%, therefore, this error has not been taken into consideration.

The recording of visitors in the Museum of St. Anton is more detailed than in the Mining Museum in Nature. In St. Anton, they divide visitors into three main groups: adults, children and foreigners (including children). Again, a very high ratio of "children" – approx. 60%, can be seen in the tables. Half of them are participants of school trips, or come with summer camp groups. The second half of the „children" segment does not participate in the above tours; they come together with their parents. This means that families with children constitute a significant group of visitors who come as individual tourists.

The following may be inferred from the data above: 30% of visitors of the Museum in St. Anton are children coming in groups, approx. 30% are families with children, slightly more than 7% are foreign tourists, and the remaining 20% are other segments visiting Banská Štiavnica and its surrounding (young, individual tourists and married couples without children). Due to a high ratio of children's tours, two peaks of tourist season, in June and August (see Table No. 3), can be noticed.

When estimating the number of visitors in the town of Banská Štiavnica, using the records made at the permanent expositions of the Slovak Mining Museum, it has to be considered that one tourist pays multiple visits to various expositions. It may be assumed that, on average, one tourist goes to see two permanent expositions of the Slovak Mining Museum. According to the director of the Mining Museum in Nature, tourists after seeing the Museum in Nature pay one visit either to the Old Castle or New Castle, and the like. If the number of tourists visiting the Mining Museum in Nature is deduced from the total number of visitors of permanent exhibitions, the number received is about 50 thousand people (i.e. it is somewhere between the number of visitors of the Mining Museum in Nature and the Museum in St. Anton).

When estimating the number of visitors at exhibitions, it has to be considered that short-term exhibitions in the individual museum expositions are visited also by local people who cannot be included in the group of tourists. It is difficult to estimate the ratio of local people; therefore, it is necessary to propose an appropriate permanent or temporary system for determining the structure of visitors of short-term expositions.

The numbers of visitors of the Slovak Mining Museum expositions in the course of 11 years are shown in the Table No. 5. In long-term perspective, the numbers of visitors are relatively stable: 105 thousand visitors per year in average (ranging from – 25 thousand to + 18 thousand visitors).

*Tab. 5: Tourists visiting the expositions of the Slovak Mining Museum in years 1992 - 2002*

Year:	Permanent expositions	Exhibitions	Total
1992	58 209	34 460	92 669
1993	70 065	10 462	80 527
1994	84 349	20 971	105 320
1995	96 046	14 534	110 580
1996	89 340	14 936	104 276
1997	87 946	26 247	114 193
1998	86 904	36 400	123 304
1999	84 475	28 268	112 743
2000	81 370	26 613	107 983
2001	80 342	13 864	94 206
2002 (k 30. 11.)	86 349	17 712	104 061

*Reference: prepared according to data from the Slovak Mining Museum in Banská Štiavnica*

The tourism expert team also acquired data from the Municipal Tourist Information Office. Due to the fact that the proportion of visitors coming to the Office is minimal, the data cannot be taken into consideration. The team members assume that most of the visitors coming to the information center are individual tourists.

If the given numbers of visitors coming to the information center are right, then a quick attempt should be made to reveal the reasons for such a low visiting rate of the information office. In addition, measures should be implemented that would increase the number of people coming to the information center, which is in fact the most important marketing institution in a tourist destination.

One such measure is proposed in this document (see below) – steering the flow of visitors so they are directed to visit the information center.

Tab. 6: Tourists visiting the Municipal Tourist Information Office (MTIO) in Banská Štiavnica during the 2002 summer season

Month	May	June	July	Aug.	Sept.	Total	%
Domestic tourists	815	1 092	2 175	2 363	1 012	7457	55 %
Foreign tourists	577	678	1 756	2 174	948	6133	45 %
<b>TOTAL</b>	1 392	1 770	3 931	4 537	1 960	13 590	100 %

Reference: Data of the MTIO in Banská Štiavnica

## II.2. Estimating the number of visitors based on the existing accommodation capacity

If the number of visitors in the town of Banská Štiavnica is estimated based on the existing capacity of accommodation facilities, which is 386 beds<sup>1</sup>, the maximal accommodation capacity is almost 139 thousand overnights per year. The average rate of utilization of the accommodation capacity in Slovakia is 40 – 60 %; based on this data the number of overnights in Banská Štiavnica would be 55 – 83 thousand. Considering the average number of 4 days that the visitors stay in the town, the number of visitors accommodated in the facilities in Banská Štiavnica is approximately 13 – 20 thousand.

By extending this methodology and including the accommodation capacity in the surroundings of Banská Štiavnica, the number of beds would be 939<sup>2</sup>, the accommodation capacity would be 338 thousand overnights, and the actual utilization, 135 – 202 thousand

<sup>1</sup> This number has been taken from the previous project report, part: "General Information on Tourism in the Region of Banská Štiavnica" - Ján Roháč

<sup>2</sup> same as in comment No. 1

overnights. Considering the 4-day stay, the number of visitors would be 33 – 50 thousand. It is likely that not all of them visit Banská Štiavnica

Private recreation houses and cabins are not included in the sum of accommodation capacity. Their occasional visitors also constitute a part of the visitors of Banská Štiavnica and its region.

## II.3. Synthesis

Considering the above data, the number of visitors who come to the town of Banská Štiavnica for the purpose of learning about cultural, historical and technical monuments is approximately 50 thousand. The partial statistics confirm that half of them are children. From the total number of children's visitors, approximately half come with school groups or from recreational camps.

The second half of children come as part of the segment "families with children". This tells us that the "families with children" group of visitors is quite large. The rest of visitors are individual travelers – young people and married couples without children.

The foreigners constitute approximately 10% of the visitors coming to see the cultural and historical monuments. Approximately half of them come as part of organized tours, and the rest of them are individual travelers.

The estimations of numbers of visitors made based on the paid admissions to particular cultural and historical monuments do not tell anything about visitors who come to the surroundings of Banská Štiavnica with a purpose of either doing sports or recreation. The expert team assumes that the tourists staying in accommodation facilities in the surroundings of Banská Štiavnica also come to visit the town, especially its restaurants, cafes, shops, etc. Based upon the estimation of the marketing employee of the Slovak Mining Museum, approx. 50% of the total number of visitors coming to Banská Štiavnica (i.e. approx. 50 thousand tourists) do not visit any exposition or museum. This is, however, a piece of information that has not been



confirmed by any exact calculations. To confirm it, statistical data would have to be collected from the accommodation facilities in the surroundings of Banská Štiavnica; however, it is known that there are significant discrepancies in these records. In addition, it is not possible to acquire statistical data regarding visitors staying in private recreational houses, cabins or with friends and families. These numbers could be acquired only if a selected survey of the above mentioned accommodation facilities would be carried out directly with the owners.

The third group of tourists are participants of congresses, conferences and seminars. These events are organized by university colleges and departments that are seated in Banská Štiavnica as well as by other institutions and organizations, such as the Forestry Research Institute, Slovak Agency for the Environment, etc. According to the results of the previous phases of the project, the total number of visitors coming to scientific events held in Banská Štiavnica is 1500 per year on average<sup>1</sup>. Considering the information that has been so far acquired, it is difficult to explain the reason for such a low number of people participating in congress tourism. One of the reasons may be that the conditions required for congress tourism are insufficient, and people prefer to go to other towns/cities (e.g. Zvolen, Banská Bystrica, etc.). Another reason may be that the actual demand for this type of tourism in Banská Štiavnica is low. Nevertheless, it may be stated that this group of visitors is irrelevant for estimating the total number of visitors in Banská Štiavnica. The above number, however, may not be accurate.

The fourth group of visitors are foreigners. The team managed to acquire individual records of foreign visitors only from the Museum in St. Anton (3926 people) and the Municipal Tourist Information Office (6133 visitors). The foreign tourists make up approx. 10% of the total number of visitors. The number of foreign visitors was estimated to approx. 10 thousand per year.

Based upon the above calculations, approx. 100 thousand (150 thousand at maximum) domestic tourists and 10 thousand (15 thousand at maximum) foreigners annually visit the town. In the report from the previous stages of the project, "Marketing" section, the annual number of visitors was estimated to be 500 – 550 thousand (in some parts of the report, estimations of 800 thousand visitors may be found). Using the accessible records of both the expositions and the information office, as well as including the capacity of the accommodation facilities in the town and its vicinity, no such high numbers came out as a result of the team's calculations.

Considering that secondary sources of data (originally not collected for the purpose of measuring the number of visitors of Banská Štiavnica as a tourist destination) were used for estimating the number of visitors, the expert team must admit that there is some degree of inaccuracy in their estimations. This inaccuracy level, however, decreases by making use of multiple sources of information. For their work, the team used the following sources of data: visitors' statistics received from selected museums, capacity of accommodation facilities in the town and its vicinity, interviews with operators of various types of tourism facilities, etc. The team's subjective estimation is that the rate of inaccuracy in their calculations is somewhere between 10 – 20%, i.e. the team members assume that the results are 80 – 90% correct. The inaccuracy rate can be decreased to 2-5 % by using primary data that are collected with the goal of estimating the number of visitors in Banská Štiavnica. Therefore, the team members propose that primary data are collected using the method of counting the incoming visitors of the town (see below).

## **II.4. Visitors Survey Proposal**

For an effective quantification of visitors of Banská Štiavnica, the expert team members propose to use two basic methods:

### **II.4.1. Tracking admissions to museums**

It would be beneficial to track the admissions to museums, expositions and exhibitions in a more detailed structure, e.g. using the electronic way of selling tickets. For this method, however, a certain amount of investment would be needed, and it is not possible to require additional investments by the given institutions.

Therefore, to complete this type of research, additional accessible financial sources will have to be looked for.

The estimated age of visitors and the district/country they come from should be the minimal number of parameters acquired.

#### II.4.2. Counting incoming cars and people in them

To collect information for the purpose of estimating the number and approximate structure of the visitors, the expert team proposes to track the incoming vehicles at three main entrances to the town, possibly also at the train station, during the summer season (May – September). This method is time limited, however relatively precise. Based on the team’s experience, a two-member team (per each location) is able to track some data, such as number of vehicles and some other parameters, even if the traffic intensity is high.

The expert team members suggest that cars and buses are counted at three locations:

- a) Hájik
- b) Crossroad by SAD (Slovak Bus Company)
- c) Pracháreň

In the case the train connection will be re-opened, the team proposes a fourth location:

- d) Train station

Counting at the selected sites makes it possible to record almost all incoming vehicles as well as the number of visitors with a sufficient accuracy rate.

The following data need to be recorded:

- Vehicle category,
- District or country of origin,
- Vehicle occupancy,
- Personal cars: number of people,

Bus: occupancy stated with the accuracy of 25% (i.e. quarter of bus, half of bus, full bus).

The following information must be included in the record letter: date and location of recording, persons who are doing the work of recording, prevailing weather, and other significant information. For proposals of record letters, see *Appendix No. 1a and 1b*.

Along with the above survey, interviews may be carried out with people on regular public buses, or in parking lots, with the purpose of estimating what part of passengers in public buses, and in cars from districts of BB, ZV, PD and LV (also others, if deemed suitable) are tourists/visitors, and what is the ratio of local people, or persons coming for a short visit (on business, shopping, etc.).

When evaluating records, personal vehicles from the districts of BS, ZH and KA will not be considered as “visiting”.

Errors may appear in the proposed system in situations when the counting teams do not manage to count the incoming vehicles. However, it can be assumed that this will happen only occasionally and such situations will be gradually eliminated due to increasing skills of teams.

In the course of summer months and on weekends, such recording could be carried out in co-operation with students (based on a work contract). During other months, unemployed people could be involved in this information gathering. They could do this as part of their public service work, which they are required to complete by the legislation. It will/would be necessary to pay special attention to the selection, training and supervision of people doing the survey.

## **III. Market segments**

### **III.1. Introduction**

In this part of report, attention will be paid to market segments (categories of visitors) that presently visit Banská Štiavnica. Also, an attempt will be made to propose which segments could and should visit Banská Štiavnica so that the position of the town as a tourist destination is improved. Therefore, the goal of the chapter is to identify target groups. This identification is necessary for developing offers and marketing.

To determine the market segments, it is possible to apply methods of tracking qualitative variables of visitors or to use the results of market surveys. The expert team members are not aware of any systematic use of such methods of marketing research in the town of Banská Štiavnica; therefore, only the results of occasional and short-term surveys, completed mainly as part of student thesis research projects, can be used. Data acquired as part of these partial surveys identify qualitative characteristics of the segments visiting Banská Štiavnica; though chances for errors cannot be eliminated. The errors are likely to happen when an inadequate method for selecting respondents is applied, or the data-gathering time period is not sufficient, etc. In spite of that, the team decided to use the results of these partial surveys. In addition, the team's personal interviews with the operators of tourist service facilities have had a significant impact on the segmentation as an output of this work. At the end, proposals of questionnaires that could be used in the future are provided. Their evaluation would help to create a more accurate picture of the individual segments visiting both Banská Štiavnica and its close surroundings.

The “staying visitors” from Slovakia come to Banská Štiavnica for 3 -4 days on average; foreigners that stay in the region come for approx. a week. However, there is a large group of one-day visitors who do not stay over-night in the town or its vicinity. They come to the town with the purpose of visiting museums, galleries, and cultural and historical monuments. They may go for lunch (not all of them) but, except for paying admission fees, their utilization of other services and goods in the territory of the town is minimal. Considering that one-day visitors constitute a relatively large group, attention should be paid (within the project) to the issue of what is being offered to them (What would be of interest to them?) , which is not too attractive from the consumption point of view. (??)

The interview surveys carried out by tourism students (for their thesis) show that half of the “staying visitors” are people aged 25 – 39; the next largest group are people of age 40 – 59. These age categories were created as a result of research on individual tourism; organized groups of visitors were not included, and it is known that children's groups constitute one quarter of all visitors, and group trips of retired people make up 10% of all the visitors coming to Banská Štiavnica.

Additional results of the interviews with individual visitors are as follows:

Education level: high school education - 60% of visitors, university education – more than 30%;

Social structure: employed people – ¾, private entrepreneurs – 10%, students – 6%.

More than half of respondents confirmed that they make repeat visits to Banská Štiavnica because of the pleasant experience they have had in the town. One third of visitors come to Banská Štiavnica based upon recommendations by family members or friends (this has a very strong influence on decision making, stronger than any advertisement).

### **III.2. Current segments from the demographic point of view**

The following segments constitute the current demographic structure of visitors coming to Banská Štiavnica:

- Children's groups;
- Families with children;
- Young people looking for entertainment, students;
- Retired people.

**Children's groups** (organized school trips and groups from children's holiday camps). Basic characteristics:

- they come in groups;
- travel by coach;
- choose boarding facilities with higher capacity and lower prices;
- motivations to come: visiting cultural and historical monuments, galleries, museums, and learning about the history of the town;
- bring minimal financial benefit to facilities providing service for tourists;
- the marketing should be aimed at school teachers, camp managers and parents, while the offer in the destination should be prepared for children (this is not the case in the present).

**Families with children** (they usually come to the region for recreation). Basic characteristics:

- they are three to four member families with the behavior of individual travelers;
- travel usually by car, therefore need space for parking;
- stay in guest houses and cottages;
- eat their own food, but also visit restaurants, cafes, confectioneries;
- motivations to come: recreation and free-time activities in the surrounding nature, water sports at lakes, and also visiting museums (although the presentation, informational materials and program are not properly adjusted to the needs of children);
- pay not only admission fees in museums, but also spend money in shops, restaurants, etc.;
- the marketing should be aimed at parents; the offer, however, should be for both parents and children.

**Young people looking for entertainment** (participating in cultural events). Basic characteristics:

They:

- come in smaller groups;
- travel by train and bus;
- stay in tents and cottages, in camps or hostels;
- eat individually in buffets and fast food restaurants;
- come with motivation such as: entertainment, organized cultural events, interest in style and reference groups, hiking;
- use their money mainly for entertainment, in bars, etc.;
- do not spend great amount of money, they are low-budget visitors.

**Retired people** (group tours). Basic characteristics:

- they usually come in organized groups;
- travel by coach;
- stay in guest houses and hotels;
- arrange eating in restaurants;
- motivations to come: visiting cultural and historical monuments, galleries, museums, learning about the history of the town;
- spend their money mainly on souvenirs, art works, etc.

### III.3. Segments according to the place of origin

#### **Domestic visitors (from Slovakia)<sup>1,2</sup>**

According to the survey made in summer 2001, the greatest number of Slovak visitors come from the Banská Bystrica region, then from Bratislava region and the Nitra region. Most of them are organized groups of children and families with children; the next largest group are individual young tourists with their friends, and retired people.

Almost 90% of respondents (i.e. individual visitors) declared that they wish to organize their trip to Banská Štiavnica individually, without using the service of a travel agency. Three quarters of visitors from Slovakia come to the town because of previous good experiences or based on recommendations received from their friends. Promotion through media and catalogues do not have a significant impact on the decision to visit Banská Štiavnica.

Most of the visitors from Slovakia expressed that the motivation of their trip to Banská Štiavnica is to visit museums, galleries and cultural-historical monuments. Less than half of respondents come to the Štiavnica region with the aim of relaxing by doing sport activities (first of all hiking, then swimming and other water sports) and spending time in nature. Considering the research that was focused on the potential visitors from Slovakia (among them also those were addressed who have never visited Banská Štiavnica before), the expert team members discovered that the interest in accommodation and eating is structured as follows: visitors of age 19 – 34 would choose to eat in restaurants of IIIrd and IVth price categories. Visitors older than 35 prefer restaurants of Ist and IInd price categories. Regarding accommodation, respondents would prefer to stay in cottages and private homes, then in hotels and guest houses. In order to plan the program of their trip, more than 80% of respondents would visit the information office (within the potential demand research, 100 respondents from various parts of Slovakia were addressed).

#### **Foreign visitors**

Foreign visitors come to Banská Štiavnica from Russia, Hungary, Czech Republic, Poland, the Netherlands, Germany and Austria.

Regarding the mode of involvement in tourism, the foreign visitors can be divided into the following segments:

- retired people,
- individual travelers
  - o families with children
  - o families without children

#### *Foreign visitors – retired people*

These visitors frequently come in organized groups by coach, and stay in hotels where they also take their meals. The segment of retired people is conservative, looking for comfort and peace. Most of the organized groups of retired people come from Austria and they stay in Hotel Topky by Počúvadlo Lake. These visitors come to Banská Štiavnica in the course of their visit in the Štiavnica region, and their motivation is to see cultural-historical monuments, visit galleries, museums and learn about the history of the town.

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<sup>1</sup> Reference: Thesis "Marketing Concept for Tourism in the Town of Banská Štiavnica", Miroslava Slivková, Department of Tourism and Hospitality, Economy faculty of the Matej Bel University in Banská Bystrica, year 2002, survey carried out in summer months of 2001 – more than 100 respondents (organized groups excluded from the survey).

<sup>2</sup> Reference: Thesis "Creating Tourism Product in the region of Banská Štiavnica - Nová Baňa - Kremnica", Monika Kmeťová, Department of Tourism and Hospitality, Economy faculty of the Matej Bel University in Banská Bystrica, year 2000, survey carried out in spring of 2000 - 66 respondents (organized groups excluded from the survey).

The financial well-being of foreign retired people is favorable, especially when considering the conditions and prices in Slovakia. They are an interesting group of consumers with strong purchasing power. They spend their money mainly on souvenirs and art works, but also on services in tourist facilities.

#### *Foreign visitors - individual travelers*

They come individually by cars, stay in hotels or guest houses of higher standard, and they eat in restaurants. The foreign individual tourists look for quality products and services, and they are willing to pay higher prices for these higher standard services. The motivation of their travel is to visit museums, galleries, and cultural-historical monuments, but also attend cultural events.

### **III.4. Segmentation according to motivation for tourist activity**

(including proposals for new segmentation)

The segmentation of the visitors' market according to the motivation for tourist activity is an effective mode of segmentation. Based upon the analysis of primary and secondary offer<sup>3</sup>, conditions for tourist product development can be identified, and satisfaction of the desires of current and future segments of visitors may be offered.

In this part of report, the existing segmentation is enlarged by (1) proposals to improve the service provided to the current segments, and (2) proposals for new segments that are currently either not present at all, or present only very insignificantly in Banská Štiavnica and its vicinity.

#### **Visitors looking for monuments**

Visitors with the intention of learning – mainly organized groups (school trips, retired groups), but also individual visitors (mainly families with children) of mainly traditional type. These visitors come to learn about new places and acquire new knowledge of history, culture, art, architecture, etc. They expect experience-based learning about the town history, or the country they come to visit. Their demands, however, are high and they expect good quality information provided by particular tourist facilities.

#### Proposals on how to improve the service provided to this segment:

- to improve the quality of guiding in museums and expositions;
- to make adjustments in guiding through the town, museums and galleries so that this service is suitable for children and organized groups of children;
- to issue information and presentation materials for the segment of children;
- to improve the presentation of monuments and their interpretation;
- to prepare evening cultural programs for organized groups of retired people in the tourist facilities of the town;
- to adjust the open hours in museums, selected shops, etc.
- to find some appropriate ways for motivating the tourists to visit also the surrounding villages and sites in nature, thus prolonging their visit of the town.

#### **Visitors relaxing in nature**

Based upon the previous analysis, the tourist expert team has found that relaxation in nature is mostly enjoyed by families with children. A certain percentage (approx. one quarter) of them go to visit the town of Banská Štiavnica, its cultural-historical monuments, museums and galleries, and also restaurants, cafes, etc. This segment carries a great potential for Banská Štiavnica as a tourist destination. It is, however, necessary to modify what is offered so that the people relaxing in the surroundings of Banská Štiavnica can find reasons to visit the town, e.g. in the evening for entertainment, attending cultural events, visiting stylish cafes or bars (some already exist in the town, although they are mainly for younger clients, for example: Piano bar, Tea House Klopáčka, Jazz Café, Café eSKo).

#### Proposals on how to improve the service provided to this segment:

The following places or events that are enjoyed by families with children should be part of what is offered in the town:

- restaurants and bars with non-smoking environment, attractive offers of cakes, and play sections;
- open terraces and gardens (garden restaurants) should be used to maximum extent during summer season;
- entertaining and educational programs for children (or for families with children) in the town, such as ,e.g., walking the fairy tale forest (presenting local myths and fairy tales), competitions about the history of Banská Štiavnica organized for families with children on the summer terrace of the information center, etc.
- performances of regional folklore, folk bands or children's dancing and other troupes held on the terrace of the information center (or on a temporary podium that will not disturb the historical appearance of the square).

#### **Visitors looking for entertainment**

Young visitors, mainly university students, look for entertainment opportunities, relaxation, style and reference groups. This segment requires organized events that are stylish, e.g. festivals (Strunobranie, and others), concerts of modern music, etc. The criticism from the owners/operators of restaurants/bars in the town of Banská Štiavnica regarding the behavior of visitors should not be one-sided, because what is offered by these facilities (cheap alcoholic beverages sold in stands on the street) supports the criticized type of behavior.

#### Proposals on how to improve the service provided to this segment:

- besides the traditional events, other regular or irregular evening (maybe daylong or weekend) events should be organized, e.g. festival of folk music, festival of traditional dances, concerts, alternative theatre plays performances, etc., and thus an image of a "town of permanent action" created;
- exhibitions should be organized to present the work of artists who come from Banská Štiavnica (many of them live today in other parts of Slovakia or abroad) and are willing to return to their hometown to present their artworks, for example: exhibition of photographs, pictures, etc. connected with opening ceremonies;
- appropriate ways should be found for motivating tourists to visit also the surrounding villages and sites in nature, thus prolonging their visit of the town.

#### **Visitors enjoying sport and adrenaline**

These visitors are young, sport oriented people who look for conditions that make extreme types of sports, such as rock-climbing, diving, paragliding, etc. possible. The surroundings of Banská Štiavnica provide opportunities for the above mentioned types of sports, and the town can also offer a convenient addition in terms of favorable conditions for entertainment as well as for accommodation and eating. This market segment is strong, and the trends confirm its permanent increase; on the other hand, it represents a source of potential negative impact on nature and biodiversity. Therefore, the approach taken to this segment and offers developed to meet their needs must be very sensitive and considerate. The offer for this segment requires to have a reliable system of nature impact management and monitoring.

#### Proposals on how to improve the service provided to this segment:

- localities should be identified where individual sports may be carried out without having a negative impact on nature, the way of doing these sports must respect the requirements of nature protection;
- it is necessary to improve the marking of trails and locations of information boards that direct people to hiking, biking and cross-country skiing trails in the close surroundings of Banská Štiavnica;
- more, and more accurate, information should be provided by the information center about the opportunities for doing sports in the surroundings; in addition, relevant maps should be sold;
- sport equipment rental should be available (bicycles, cross-country skis, equipment for diving, and relevant accessories);

- instruction service for extreme sports should be provided – for rock-climbing, paragliding and diving;
- certification of guides and instructors should be started, and sports that may have a negative impact on the natural environment or those that take place in sensitive localities should be allowed only under the supervision of certified guides and instructors;
- in the evening, entertainment and relaxation in restaurants/bars should be available (concerts of young “talents” of the Slovak music scene, performances of music bands, e.g. jazz, folk, and the like).

#### **Participants of conferences and seminars**

This segment is currently quite small. Institutions of the town, such as high schools and universities, national organizations, etc. offer conditions for building up this segment. On the other hand, this segment is strongly limited by the low accommodation capacity and the lack or inconvenient location of meeting rooms. It should be also seriously taken into account that the competition of already existing and more suitable centers in Slovakia is quite strong.

#### Proposals on how to improve the service provided to this segment:

- the co-operation of institutions that organize or help to organize various conferences and seminars should be improved (there are various institutions in the town, and their co-operation could result in synergy - thus improving the effectiveness of organizing events);
- at least one high quality seminar center should be created, it can be small, but well equipped.

### **III.5. Synthesis and summary**

When developing a segmentation strategy, it is extremely important to define what impression the town of Banská Štiavnica wants to make in the minds of individual segments of visitors. It is required that the representatives of segments (either organized groups of children, families with children, retired people, or young people looking for sport and entertainment) have an idea what to expect from the days they spend in Banská Štiavnica. When the segmentation strategy and the position profile of the town for individual segments are clarified, and after what is offered to these segments is created/improved, the marketing tools strategy must be adopted. This strategy may start to be developed already during the process of creating offers. The tools of the marketing strategy, such as the product, distribution, price and communication strategy, and policy, should help to arrive at the pre-defined position of the town. This activity that follows the purpose of taking a position by the town of Banská Štiavnica on the tourism market is called “positioning”. The marketing tools strategy and goals of positioning must be adopted by a regional tourism association, or by another entity that is responsible for what is offered by the town of Banská Štiavnica and its close surrounding as a compact tourist destination.

The truth is that the town and its region do not have such a clarified tourism development strategy; no directions of development and means to meet them have been determined. If the town and its inhabitants consider tourism to be one of the directions of the town’s development, a tourism development strategy of high quality must be immediately prepared and implemented. Otherwise, the town will lose its comparative advantages.

### **III.6. Analysis of possibilities to adjust what is offered to newly defined market segments**

In the previous part of report, new appropriate market segments for tourist products in Banská Štiavnica were defined; also, it was identified what is necessary to improve in what is offered to individual segments. In the following part, SWOT analysis of the situation in Banská Štiavnica will be carried out, while looking at the town’s ability to adjust/improve its offers and address the selected segments of the market.



**Strengths:**

- Banská Štiavnica is on the UNESCO World Heritage List;
- Banská Štiavnica is relatively well known in Slovakia as well as abroad;
- Rich mining history of the town and region;
- Presence of many mining monuments in the town and surrounding nature;
- Possibilities to visit three mines;
- Museum in St. Anton and its activities;
- System of former water channels, roads and trails that are suitable for hiking and biking;
- Many lakes providing opportunities for swimming;
- Surrounding of the town is suitable for active relaxation in nature;
- There are organizations in the town that can support tourism, or even become leaders in this field;
- High schools and universities in the town have a great potential for co-operation in tourism development;
- Patriotism of natives and people with positive attitude to the town (also those who do not live in the town);

**Opportunities:**

- Good location that is close to the agglomerations of Bratislava, Budapest and Vienna;
- Traditional historical relations of Hungary to Banská Štiavnica;
- Increased interest of people from cities (with relatively high purchasing power) in centers of tourism that are not overcrowded and offer attractive things to see;
- Increased trend in going on short-term additional vacations;
- Reconstruction of historical buildings in the town;
- Access to pre-entry, structural and other EU funds;
- Membership of the town in the Association for the Central Hron Region Development;

**Weaknesses :**

- No generally accepted vision and strategy of the town's development (including tourism) exist; there is no marketing strategy and no concept of tourism development prepared for Banská Štiavnica and its surroundings;
- Local government bodies do not pay appropriate attention to tourism;
- Low-quality service by the Tourist Information Office and its passive attitude;
- Inadequate marketing of the region in Slovakia and abroad;
- Unsatisfactory co-operation of institutions and organizations in the town (within sectors and among them), absence of a regional tourism association or other appropriate structure, limited co-operation of Banská Štiavnica with the surrounding towns and villages;
- Poor quality of service provided, unqualified people working in tourism and lack of hospitality of personnel;
- Poor physical condition of most of the buildings in the center of the town, extraordinary dirty and abandoned public areas in the town;
- Non-existence of complex tourist products and packages designed for individual segments;
- Insufficient offer of service for active relaxation and free-time;
- Absence of appropriate facilities for social events, such as concerts and theatre performances;
- Few extra-seasonal cultural and entertainment events that can bring more life to the town and attract a greater number of visitors as well as domestic people;
- Inconvenient open-hours in museums and galleries;
- Insufficient marking of sites that are attractive for tourists, absence of an orientation system in the town;
- Problems with traffic in the town (road conditions are unsatisfactory, not enough parking space, insufficient local public transportation) and also beyond the town (poor transport connections with the surroundings, closed train connection);
- Ignoring of the need to deal with the problem of Roma people living at Šobov;

- Lack of free-time facilities that could be used by families and children (confectionery, play-grounds for children, etc.)
- Lack of awareness of the benefits of tourism within the local population.

**Threats:**

- uneven development of regions in Slovakia, still unclear concept of the future development of Slovak regions;
- unclear concept of tourism development in Slovakia;
- unstable legislation;
- unfavorable qualification structure of the free labor force;
- lack of financial resources to support small enterprises;
- low level of law enforcement, bureaucracy and corruption.

## **IV. Outline of the visitor steering system**

### **IV.1. Introduction**

The purpose of steering the visitors of Banská Štiavnica is to manage their travel so that the following goals are met:

- minimizing the negative impacts of visitors on the community and the environment;
- increasing the satisfaction of visitors;
- increasing the positive impacts of visitors on the community and the environment;

In this document, basic locations that have an important role within the system of visitor steering are indicated; also, some basic corridors of travel are proposed. It is not the aim of the team's work to propose a detailed visitor steering system at this stage of the project. In addition, it cannot be proposed before the priorities of the development of the town of Banská Štiavnica are clearly outlined. However, the expert team members hope that the essential features of the visitor steering system that is proposed in this report will create a solid ground for later, more detailed works. The proposals in this report could also help the local authorities and businessmen with channeling their investments and activities in the town.

For outlining the visitor information system, the following must be identified:

- A. Target points:
  - A.1. Attractive and interesting things/sites
  - A.2. Tourist infrastructure
  - A.3. Other services
- B. Service points
  - B.1. Entry points
  - B.2. Accumulation points
- C. Corridors of visitors' travel

#### **A. Target points**

##### ***A.1. Attractions and interesting things/sites***

These are the places that are usually the reason (or one of the reasons) to visit the target destination. In addition to providing information about the site itself, such a point may be used to steer the travel of visitors (after they leave the given attraction). To some extent they may also be used for providing information about other sites, but the visitor is mainly focused on the given attraction and has a decreased ability to perceive information about other attractive places in the town or region. This does not mean that such information should not be placed there, however, it should be presented in an appropriate way.

In Banská Štiavnica and its surrounding, the following places are among the target points:

- Old Castle;
- New Castle;
- Holy Trinity Square and the buildings there;
- Buildings of Kammerhoff and Bergericht;
- Mining Museum in Nature, Glanzenberg mining tunnel;
- Botanical garden;
- Saddle Červená studňa;
- Lakes in the vicinity of the town;
- others.

### **A.2. Tourist infrastructure**

Places that provide service for tourists, such as restaurants, accommodation facilities, banks, shops, rentals, rest areas, etc., can be included in this category. The tourist information center takes up a specific position within this category.

These places are appropriate to be used for orienting the visitor and steering his/her further travel, as well as for offering wider tourist and other information about the town and region. Here, the visitor is not so focused on one topic as during a visit to a tourist attraction. He/she also usually has more time and quiet moments, and this increases his/her ability to perceive the information provided.

Providing information to the visitors and steering them are considered to be natural activities to be carried out by the management of these facilities; the tourists take it as something self-evident that they receive all the necessary information at these places.

In Banská Štiavnica, these place include:

- municipal tourist information office;
- all accommodation facilities;
- restaurants and similar facilities visited by tourists (i.e. not pubs and the like);
- shops in the center of the town that are visited by tourists (e.g. shops to buy souvenirs, antiques, newspapers, magazines and books);

### **A.3. Other infrastructure**

Places that are not directly related with tourism, but visited by tourists, belong to this category. The visitor does not expect to acquire information here, however, these sites are also appropriate for informing and steering the tourists. The personnel of facilities belonging to this category are not trained to provide tourist information and they consider this to be extra work.

Such places are appropriate mainly for steering the travel of visitors and giving them practical information. It is not necessary that they be ready to provide detailed information about attractions, events, etc.; however, the personnel should be prepared to flexibly answer questions such as: “What is the most interesting thing to be seen in your town?”, or “How do I get to the information office?”, or “Where is a good restaurant here?”, etc.

In Banská Štiavnica, the following places may be included in this category:

- grocery shops, pharmacies, toy stores, etc.
- banks, offices;
- gas stations, car-repairs;
- health-care facilities, and others.

## **B. Service points**

These are points the visitors frequently pass by. Here, the tourists can get some basic information in the form of slogans and instructions. These points are also appropriate for steering the visitors, and if convenient, they may also find at these places some basic interpretation of the historical heritage. Service points are usually busy places, therefore, attention must be paid also to safety.

All visitors of the town must pass through these points. Traffic points may be considered as the essential ones in the visitor steering system.

From the point of view of steering the travel of visitors, none of the existing service points fulfils its function. Basic direction signs for cars (at the entrance to the town) are missing, and the situation is the same in parking lots and bus and train stations. A visitor who wants to get to the center must only rely on his/her intuition or ask local people for direction.

The visitor should receive a minimal set of information after parking the car/bus or getting off the train/bus:

- map of town center with the following important points highlighted:
  - MTIC and most important target points;
    - o Accommodation facilities and restaurants;
    - o Basic infrastructure (important public institutions, exchange offices, banks, etc.);
    - o Other significant points;
- larger map of the town and its surrounding;
- visible starting signs of the way that takes people to the MTIC.

The service points were divided by the team to (1) access points and (2) accumulation points (at some places they may be both at one location):

*Access points* – the visitors cross them when entering the town.

*Accumulation points* – visitors gather here.

### **B.1. Access points**

The access points are places crossed by the visitors when entering the town. They are good for providing basic information (in the form of a slogan, logo, pictogram, etc.), giving a first impression and steering the further travel of visitors. These points may be divided as follows: (1) walkers' access points (crossed by walkers and partially by bikers), (2) road access points (cars, buses, partially bikers) and (3) mass access points (buses, trains).

In the town and its surroundings, 6 essential and 3 supplementary access points were defined by the expert team:

Road access points:

1. Hájik
2. Pracháreň
3. Sitnianska street by SAD (Slovak Bus Transportation Company)
4. Červená studňa
5. Kolpašská road (supplementary access point)

Mass access points

6. Križovatka (including the bus station)
7. Bus stop at Hájik
8. Train station

The expert team members have not identified any significant walkers' access points of the town.

For a more detailed description of access points, see *Appendix No. 2: Access Points of the Town*.

Even though some signs indicating the intention to steer the travel of cars and buses are visible in the town, it must be declared that de facto the cars and buses are not directed to appropriate parking lots at all. They usually come as far as the complicated center of the town, and here by asking local people they need to find out where the closest available parking lot is. In better cases, the drivers may know the situation in the town from previous visits, and thus know where to look for parking lots.

The situation is similar also when coming to the town by bus or train. Except for a few orientation items, which are unfortunately located out of any concept (e.g. maps on the bus station), the incoming visitor is neither directed towards the town center nor informed about the possibilities to use public transport to get to the center.

## ***B.2. Accumulation points***

The accumulation points are places where the visitors of the town gather with or without a purpose. They are suitable for providing more detailed information for the visitor to read or look at while he/she has enough time and comfort to perceive and making decisions. The information provided may intend (1) to provide heritage interpretation, but also (2) steer the visitor and (3) offer basic tourist information. In the context of Banská Štiavnica, parking lots, bus station and the train station may be considered to be accumulation points. In addition, points of the category *A.1. Attractions and interesting things/sites* may also be included in this group. They, however, are described in a separate section (see above).

Bus and train stations - see in part *B.1. Access points*.

### **Parking lots**

Parking lots are used by visitors who come to the town by car or coach. The surface of these parking lots should be compacted (it does not necessarily have to be asphalt or concrete). Besides the required traffic signs (for parking, sidewalks, pedestrian crossings, etc.), clear and easy-to-understand instructions for visitors should be placed there (e.g. information boards, direction to the starting point of the tour of the town, direction to the center, direction to the information center, direction to toilets, etc.). Parking lots may also serve the purpose of offering some initial information about the locality (even though the aim should be to get the visitor to the center or to an attraction, and not to keep him/her too long in the parking lot).

Parking lots are among the weaknesses of Banská Štiavnica. The town has not built true catching parking lots; there are three smaller ones (New Castle, Akademická street, Staré ihrisko) that are used by visitors and their total capacity is approx. 300 cars. People can also park their cars along the main roads (Kammerhofská street, Mládežnícka street) and in parking lots that are further away from the center (Križovatka, in front of the former Tobacco factory, etc.). It is still possible to park cars in the historical center of the town, even directly on the Holy Trinity Square. Despite there are only few places for parking, they disturb the environment of the center. (?)

The above mentioned parking lots are neither marked clearly on the access roads, nor connected to create a system. Also, no items of a standard orientation system are located on them. The parking lots are not guarded and they do not meet basic hygienic requirements either (no toilets, washing rooms, etc.).

## **C. Corridors**

The goals of visitor flow management are (as stated earlier):

- to minimize the negative impact of the presence of visitors on the community and the environment;
- to increase the satisfaction of visitors;
- to increase the positive impacts of the presence of visitors on the community and the environment.

In order to achieve these goals, it is necessary to steer the visitors so that they:

- do not increase the intensity of impact on localities already heavily used either by cars or walkers;
- do not occupy the local people's space more than necessary (in shops, churches, parking lots, etc.);
- do not become disoriented;
- visit shops and restaurants;
- join in the process of building the positive image of the town as a pleasant tourist destination;
- visit the wider nature around the town;
- go to see also the less intensively visited parts of the town and region.

Considering that the area of the historical center of Banská Štiavnica is small, but diverse, the expert team suggests that the Municipal Tourist Information Center on the Holy Trinity Square is used as a main tourist point of the town (respecting the above stated requirements). The visitors who come to the town (passing through the service points), and/or spend the night in the town, will be primarily directed to the MTIC, and only from there they will be steered to various attractions (target points) or routes that connect them.

The advantages of such a system (“from parking lot/bus station/hotel to the info-center and from there to historical sites”), in comparison with dispersed flows of visitors (“from the parking lot directly to historical sites”), are as follows (among others):

- it is sufficient to have a more simple orientation system;
- the locations in the town that need investments by the town management or entrepreneurs are more clearly defined and smaller in area
- the required information is distributed to the visitors, or received from them, more effectively;

For creating such system, it is important to develop a new orientation system, but first of all, to improve the work of the MTIC and increase its capacity.

The visitor corridors (or in other words, lines of marking) defined according to the principles introduced above may be put into four categories:

1. Directing cars and buses to parking lots;
2. Directing bikers to the MTIC;
3. Directing visitors from parking lots, train and bus stations to the MTIC;
4. Directing visitors from the MTIC to individual attractions or service sites.

### **C.1. Directing cars and buses to parking lots.**

Two-way routes with traffic signs *D11 Parking lot* with an additional information “Center” shall be followed. At present two parking lots are proposed by the team, (1) by the Mining school on Akademická street and (2) under the New Castle, for the use by visitors. Parking lot on Mládežnická street is temporarily not proposed by the team because of its difficult access. After the access to this parking lot is improved, it may be included in the parking system. The proposed routes are then as follows:

#### *C.1.1. Hájik – parking lot on Akademická street by the Mining school.*

Marked route: Hájik – crossroad below Hájik – left turn from the Akademická street to the parking lot.

#### *C.1.2. Pracháreň – parking lot below the New Castle.*

Marked route: intersection of streets *Sitnianska* and *Pod Trojičným Vrchom* (by the SAD garages) – Pracháreň – Mining Museum in Nature – right turn from Sládkovičova street to the parking lot below the New Castle.

Notes:

- Visitors coming from the direction of the village of St. Anton are directed at the intersection of streets *Sitnianska* and *Pod Trojičným vrchom* to Pracháreň (i.e. they follow the new road that is bypassing the town center). No signs indicating the direction to “Center” shall be placed on this crossroad.
- Direction to the parking lot with the sign of “Center” will be placed on the “Pracháreň” location on both roads, one coming from the direction of St. Anton and second from Levice.

### **C.2. Directing bikers to the MTIC**

Two way road lines that are marked by traditional signs for bikers are part of the network of biking trails that are being built by the local club of bikers *Hámrik*. On places marked “X” below, signs indicating the direction to the MTIC should be placed.

The proposed routes are as follows:

#### *C.2.1. Červená studňa – Hájik – Holy Trinity Square (MTIC).*

Marked route: Červená studňa „X“ - Hájik „X“ – Mierová street – Akademická street – A.Kmeťa street – Holy Trinity Square

*C.2.2. Červená studňa – Vodárenská street – Holy Trinity Square (MTIC) (MTB route).*

Marked route (yellow biking route sign):

Červená studňa „X“ – Vodárenská street – Dolná ružová street – Holy Trinity Square

*C.2.3. Pracháreň – Holy Trinity Square (MTIC).*

Marked route: Hájik „X“ – Mining Museum in Nature „X“ – Sládkovičova street – Holy Trinity Square

*C.2.4. Entrance to the town from the St. Anton direction – Križovatka – Holy Trinity Square (MTIC).*

Marked route (red biking route sign): Sitnianskeho street – Križovatka „X“ – Dolná street – Kammerhofská street – A. Kmeťa street – Holy Trinity Square

*C.2.5. Entrance to the town from Banský Studenec direction – Holy Trinity Square (MTIC).* Marked route:

Poľovnícka street – Kolpašská road – Križovatka „X“ – next as in B.4.

### **C.3. Directing visitors from parking lots, train and bus stations to the MTIC;**

Two-way routes marked as part of the municipal information system.

*C.3.1. Parking lot by Mining School – Holy Trinity Square (MTIC).*

Marked route: Parking lot by the Mining school – Akademická street – A. Kmeťa street – Holy Trinity Square.

*C.3.2. Parking lot below the New Castle – Holy Trinity Square (MTIC).*

Marked route: Parking lot below the New Castle – Novozámocká street – Holy Trinity Square

*C.3.3. Train station – Bus station - Holy Trinity Square (MTIC).*

Marked route: Train station – Križovatka (bus station) - Dolná street – Kammerhofská street – A. Kmeťa street – Holy Trinity Square.

Notes: On the bus and train stations, access to local bus stations must be clearly marked and the time schedule of buses going to the center provided.

*C.3.4. Bus stop Under Calvary – Holy Trinity Square (MTIC).*

Marked route:

Option 1.: Bus stop Under Calvary – Lesnícka street – Mierová street – Akademická street – A. Kmeťa street – Holy Trinity Square.

Option 2: Bus stop Under Calvary – Lesnícka street – Mierová street – Botanická street – Dolná ružová street – Holy Trinity Square.

Note: On the bus stop, the transfer to the local bus stop must be clearly marked and the time schedule of buses going to the center provided.

### **C.4. Directing visitors from the Holy Trinity Square (MTIC) to individual attractions or service sites.**

These corridors will, on one hand, direct the visitors from the MTIC to individual natural, cultural or other attractions, and to places that provide service, and on the other hand, they will interconnect the attractions of the town as well as service providing locations.

The corridors are two- as well as one-way route lines that are marked within a standard municipal information system, but also by local signs (marked routes). At the same time, these routes should be available in the form of simple itineraries, and be generally known by both local people and personnel of various facilities.

Respecting the above defined principles, the team proposes to establish the corridors stated below. They are designed to lead the visitors by significant attractions of the town and its vicinity, but also cross places of current or potential business activities (shops, restaurants, etc.).

**Town loops:**

*Route No. 1:*

Holy Trinity Square (MTIC) – Old Castle – New Castle - Holy Trinity Square (MTIC);

*Route No. 2:*

Holy Trinity Square (MTIC) – A. Kmet' street – Botanical garden – Dolná ružová street - Holy Trinity Square (MTIC);

*Route No. 3:*

Holy Trinity Square (MTIC) – Dolná ružová street – Vodárenská street – Dr. Lichard street – Starozámocká street – Anton Péch street – Horná (Upper) Resla – Novozámocká street – Holy Trinity Square (MTIC);

**Loops in the vicinity:**

*Route No. 4:*

Holy Trinity Square (MTIC) – saddle Červená studňa – lake Klinger - Holy Trinity Square (MTIC);

*Route No. 5:*

Holy Trinity Square (MTIC) – Veľká vodárenská lake – Old Town hill – excavations under Glanzenberg - Holy Trinity Square (MTIC);

*Route No. 6:*

Holy Trinity Square (MTIC) – Botanical garden – Calvary – Beliansky Lake – Jergištôľňa – Červená studňa saddle – Holy Trinity Square (MTIC).

## V. Identification of basic traffic problems related to tourism

Considering traffic, Banská Štiavnica is in a specific situation – (1) it is not located on main traffic lines and some of the road accesses are quite complicated; (2) the geomorphologic conditions, location and the town structure make the traffic in the town itself complicated, too. While the difficult access to the town is a disadvantage on one hand, and an advantage on the other one (the attractiveness of the town is increased), the traffic problems in the town itself complicate the situation for visitors and decrease the quality of their experience.

The presence of a large number of personal cars and trucks in the town is the essential problem of traffic in the town. The consequences are as follows:

- traffic jams in the town center;
- large number of parked vehicles;
- noise and air pollution;
- low safety.

These facts decrease the quality of the visitors' experience, and contributes to building an image of Banská Štiavnica as a town that is noisy, tight, and not providing an opportunity for comfortable walk.

The following pints/sites are among the most critical:

### 1. Kmet' street in the section from the statue of A. Kmet' to Hrib

The main road crossing the town is very narrow here; it is only few meters wide. Often, there are cars and trucks parked here and they cause traffic jams. Due to the fact that the side walks are right on the edges of the road, the walkers are bothered by noise (sometimes it is not possible to hear the other person speaking) and air pollution. One of the sidewalks is very narrow and by no means separated from the road.

*Indications for problem solution:* to limit trucks entering the center; to support public transport (so the inhabitants do not drive their cars to the center); to respect forbidden parking.



## **2. Junction of the Radničné square and Sládkovičova street**

Narrow and unclear place passed by vehicles on the road and walkers on thin sidewalks.

*Indications for problem solution:* to widen the sidewalks and separate them clearly from the road; to slow down the traffic.

## **3. Holy Trinity Square**

This place is the visitor center of Banská Štiavnica; the intensive travel of walkers is confined by parked cars, but mainly by vehicles passing by both sides of the Plague Column.

*Indications for problem solution:* to exclude car traffic from the square (exceptions should be given only to people living on the square, and – with time limitation – to cars supplying the businesses on the Square; to direct the vehicles to use only one (West) traffic line; to support public transport (so the inhabitants do not drive their cars to the center).

## **4. Access road to the parking lot on Mládežnícka street**

The parking lot on Mládežnícka street is the largest one in the town, and its distance from the center is still convenient for walking (approx. 10 minutes). It is, however, not possible to include it in the system of parking in Banská Štiavnica because the access to this parking lot by bus, car or foot is difficult – narrow and steep curving road with thin or no sidewalks are dangerous for walkers, but also demand a lot maneuvering by cars (on some sections the cars meeting in opposite directions must put effort into avoiding crash). This road is also difficult to maintain in the winter season.

The travel of visitors from the parking lot to the town center is not handled either.

*Indications for problem solution:* to carry out construction works, mainly from the north direction.

## **5. Lack of parking space**

As stated above, the capacity of car and bus parking in the center and its vicinity is not sufficient. The parking lots by New Castle and Mining School are used the most in the present. Also, the intensity of parking in the streets of the center is high. The capacity of the parking lot on Mládežnícka street is yet not used (see above), and neither is the space on Dolná ulica (in front of the former tobacco factory).

*Indications for problem solution:* to build a multilevel parking lot by the Mining School; to make the parking lot on Mládežnícka street easier to access; to build a parking lot in front of the former tobacco factory (to make possible public transport to the center from here); to support public transport (so the inhabitants do not drive their cars to the center).

For bus parking, the SAD (Slovak Bus Transport Company) could offer their company space (along with the offer of other services such as bus maintenance and cleaning, room for driver resting, etc.)

## **6. Hájik**

The saddle Hájik is an access point to the town for vehicles coming from the directions of Bratislava, Czech Republic, Žiar nad Hronom, Zvolen, Banská Bystrica, north and east Slovakia. It is frequently not possible to drive across Hájik in winter time. As a result, there are traffic jams and accidents happening at this place, causing delays in public as well as individual transports.

*Indications for problem solution:* to pay priority attention to this road maintenance in winter months; to impose obligatory use of chains by trucks in bad weather conditions in winter (with an obligation to put them on even before entering the village of Banská Belá).

## **7. Public transport**

Public transport is a specific problem of Banská Štiavnica. It can be perceived in three dimensions; however, the identification of problems, such as low number of connections, low quality of service and not harmonized bus schedules, is the same for all three of them.

*Long-distance and regional public transport* – problems with this type of transport force tourists and other visitors (including those coming on business trip) to travel by car to the town.

*Local (district) public transport* – problems with this type of transport force people from the district who commute to the district town of Banská Štiavnica, but also visitors who want to travel out of the town, to use cars.

*Town public transport* – problems with this type of transport force the inhabitants of the town to use cars for travelling within the town; also, lack of this type of transport contribute to the fact that the inhabitants and students do not choose to spend their free time (afternoons, evenings, weekends) in the town center.

*Indications for problem solution:* to redesign essentially the system of public transport related to Banská Štiavnica

**ANNEX 1**

**Counting visitors in Banská Štiavnica**

**CAR**

Sheet No.:

Location of recording:

Date:

Recording time on this sheet:

From: To:

Persons doing the recording:

C	ID	OR	C	ID	OR	C	ID	OR	C	ID	OR	C	ID	O R

C (category): P-personal vehicle X- bus

ID: District code or international identification sign (Local cars to be circled); OR (occupancy rate): personal vehicle – number of passengers; bus – estimation of the number of fill-up quarters: 1 – 25%, 2 – 50%, 3-75%, 4-100%

## ANNEX 2

### Counting visitors in Banská Štiavnica

**TRAIN**  
Sheet No.:

Location of recording: \_\_\_\_\_ Date: \_\_\_\_\_  
Recording time on this sheet: From: \_\_\_\_\_ To: \_\_\_\_\_

Persons doing the recording: Train No.	
Arrival time	
Number of passengers	
Estimation of visitors number	

Train No.	
Arrival time	
Number of passengers	
Estimation of visitors number	

Train No.	
Arrival time	
Number of passengers	
Estimation of visitors number	

Train No.	
Arrival time	
Number of passengers	
Estimation of visitors number	

Train No.	
Arrival time	
Number of passengers	
Estimation of visitors number	

## ANNEX 3

### Access points to the town

#### 1. Hájik

*There is an intricate transport situation on the entrance to the town from the north by roads No. 525 (from directions of Banská Bystrica, Zvolen and Žiar nad Hronom) and No. xxx (from the directions of Bratislava and Nitra through Žarnovica).*

Location: North of town

Characteristics:

It is an intersection of busy roads that is located in a moderate saddle. In addition to the above described two roads, three local streets join this intersection on Hájik: Hájik street leading from Calvary, Michalská street, and J. M. Hodža street leading from Jergištôľňa. Blue marked hiking trail 2667/b Banská Štiavnica – Žiar nad Hronom crosses the locality. In addition, there is a bus stop on Hájik for local and regional buses.

The traffic situation is quite unclear on this site because the intersection is located on the top of a steep ascent that is rather intensively used also by pedestrians, mainly from the Banská Štiavnica direction. In summer, however, it is also used by pedestrians coming from the direction of Banská Belá (people going home from Beliansky Lake).

Our estimation is that this is the most heavily used town entrance.

Use:

*Arrival to the town:*

a) regional and long-distance traffic (car, bus, road bicycle):

- on road No. 525 from Zvolen and Banská Bystrica (and further from the direction of Liptov, Orava, Tatras and Poland), as well as from Žiar nad Hronom (and from the Czech Republic) and Kremnica (and from Turiec);
- on road No. xxx from the direction of Sklené Teplice, Žiar nad Hronom and the Czech Republic;
- on road No. xxx from the direction of Žarnovica, Nitra, Bratislava and Vienna;

b) suburban traffic (car, bus, road bicycle, by foot):

- on road No. xxx from the direction of Vyhne and Bzenica;
- on J. M. Hodža street leading from the suburban part of Jergištôľňa (no bus), as well as on the blue marked hiking route leading from Podhorie (and Žiar nad Hronom);

c) local traffic (car, bicycle, by foot):

- on Hájik street from below Calvary;
- on Michalská street from Michálka;
- on road No. xxx from Šobov and saddle Červená studňa;
- on road No. 525 from Beliansky Lake (by foot).

*Departure from the town:*

In addition to its use as a route out of the town, the locality is crossed by routes taking people to favoured places of trips and relaxation, such as Červená Studňa (car, bicycle), Beliansky Lake (car, bicycle, by foot), Jergištôľňa (car, bicycle, by foot), Calvary (side access by car, bicycle, or foot), etc. The town visitors cross the locality also when going for car, bus or bicycle trips to the region of Banská Bystrica, Kremnica and Hodruša.

Parking:

There are no parking lots in the given locality; safe emergency stops are possible at two places on the roadside.

## 2. Pracháreň

Moderately unclear entrance to the town on road No. 524 from the direction of Štiavnické Bane and Levice, and from the SE direction of St. Anton and Budapest.

Location: south of town

Characteristic:

It is an intersection of T shape where a moderately busy road No.524 and J. K. Hell road meet. Except for these roads, other local roads join the intersection: the road from Klinger Lake and the village of Horná Roveň, the unpaved road from the Coal Mining Exposition of the Slovak Mining Museum, and the road from the Max shaft. The bus stop of suburban bus service is located there.

The main crossroad is clear and well marked, however, the junction of other roads (approx. 50 m from the crossroad in the direction of the town) is intricate and dangerous because of its location on the top of an ascent. As a result, the view is quite limited when entering or getting off the main road. For the latter one, the vehicles must cross the opposite direction of the road when turning.

Use:

*Arrival to the town:*

a) regional and long-distance traffic (car, bus, road bicycle):

- on road No. 524 from Levice, Nitra, Bratislava and from southern Slovakia;
- on road No. 524 from the direction of St. Anton, from Hont, Šahy and Budapest;

b) suburban traffic (car, bus, bicycle, by foot):

- on road No. 524 from villages in the southern part of the Banská Štiavnica district (Štiavnické Bane, Počúvadlo, Dekýš, Baďan-Klastava, Vysoká), and from Pukanec and Bátorovce, etc.;
- on the road from Horná Roveň;

c) local traffic (car, bicycle, by foot):

- on the road from Klinger Lake;
- on the road from Max shaft.

*Departure from the town:*

In addition to its use as a route out of the town (directions are described in the section *Access to the town*), the locality is crossed by routes taking people to favoured places of trips and relaxation, such as Klinger Lake (car, bicycle), Horná Roveň (car, bicycle), the village of Štiavnické Bane (car, bus, bicycle, by foot), Richnava and Počúvadlo Lakes, Mt. Sitno (car, bus, bicycle), etc.

The town visitors cross the locality also when going for car, bus or bicycle trips to the region of Pukanec and Bátorovce, partially also to the Hont region (e.g. to Brhlovce, a tourist attraction).

Parking:

There is no space designated for parking in the given locality. There is a large rest area on road 524, approx. 100 meters from the intersection in the direction of St. Anton. Safe emergency parking is available (1) on the bus stop, (2) on the junction of the road from Horná Roveň, and (3) below the building of the Coal Mining Museum. It is, however, necessary to emphasize again that the situation on the turn to Horná Roveň is very unclear for cars as well as pedestrians.

## 3. Sitnianskeho street by SAD (Slovak Bus Transport Company)

It is an easy crossroad of T-shape – turn from the main road No. 524 to the town (towards Križovatka). Also, vehicles coming from the south enter the town through this intersection (from the direction of St. Anton, Hontianske Nemce and Budapest).

Location: SE from the town

Characteristics:

Intersection – turn to the access road going to the town. Wide roads meet in this intersection and the traffic signs are appropriately placed. There is a clear turn to Povrazník 100 metres NW of the intersection (in the direction of Pracháreň).

Pedestrian traffic is moderately intensive in this location.

In addition, there is a gas station located approx. 500 m from the intersection, on road No. 524, in the direction of the village of St. Anton.

Use:

*Arrival to the town:*

- a) regional and long-distance traffic (car, bus, road bicycle):
  - on road No. 524 from the direction of St. Anton, Hontianske Nemce, Dudince and Budapest;
- b) suburban traffic (car, bus, bicycle):
  - on road No. 524 to the southern and eastern part of Banská Štiavnica from the villages of the southern part of the district (Štiavnické Bane, Počúvadlo, Dekýš, Baďan-Klastava, Vysoká);
  - on road No. 524 from villages of the SE part of the district (St. Anton, Prenčov, Beluj) and from the neighbouring district town of Krupina;
  - on L. Exnár street coming from Ilija;
- c) local traffic (car, bus, bicycle, by foot)
  - on L. Exnár street from Povrazník and Podsitinianska;
  - on road No. 524 from the SE industrial zone of the town.

*Departure from the town:*

In addition to its use as a route out of the town (directions are described in the section *Access to the town*), the locality is crossed by routes taking people to Ilija. From Ilija, the route continues either to Mt. Sitno or to the manor house in St. Anton. The place is also crossed by people from the southern and eastern part of the town heading towards the lakes in Štiavnické Bane, Richňava and Počúvadlo.

Parking:

There is no space designated for parking in the given locality. Safe emergency parking is possible in straight sections of the wide roads.

#### **4. Červená studňa**

It is an intensively used locality in the saddle of the main range of Štiavnica Hills. The place has some problems because it is used for multiple, frequently conflicting purposes, mainly transport and recreation.

Location: NW of the town;

Characteristics:

It is an exposed locality with many functions meeting in a small area.

- transport function – three roads meet here (one of them is used as a connecting road to the main road to Bratislava); parking (very intensive during winter when the ski lift and/or cross-country ski trails are in operation);
- tourist function - three marked hiking trails, three educational trails, one marked scout trail, several non-marked but used trails and unpaved roads, and at least one planned biking trail;
- sport function – ski lifts are nearby, and the locality is crossed by the route of the mountain biking marathon;
- relaxation function – place is used for walks and picnics by the inhabitants of Banská Štiavnica;

- economic function – protected zone of water source, occasional deposit of wood, water supply pipe;
- potential information function – an *information platform* is planned here; its purpose will be (1) to provide information about the natural and cultural heritage of Banská Štiavnica and its region, (2) to motivate people to go for a hike or walk the trails, and (3) to inform visitors about the protection of natural and cultural heritage in the surroundings;

There is one permanent residency and several rare natural localities in the close vicinity of *Červená Studňa Lake*.

Use:

*Arrival to the town:*

a) long-distance and regional traffic(car, bus, bicycle):

- on road No. xxx from Žarnovica and Bratislava;

b) suburban traffic (car, bus, road bicycle, MTB):

- on road No. xxx from Hodruša and Dolné Hámre;
- on road No. xxx from Vyhne and Bzenica;

c) local traffic (car, road bicycle, MTB, by foot):

- unpaved roads from below Mt. Paradajs – sporadic use by people living by Ottergrund Lake and holiday-makers;
- unpaved roads that meet in the saddle – intensively used by hikers, bikers, mountain-bikers, and cross-country skiers.

*Departure from the town:*

In addition to the roads that cross the locality on the way out of the town (directions are described in the section *Access to the town*), this locality is mainly a target place of active relaxation in nature, and it also serves as a parking lot.

Parking:

There is no space designated for parking in the given locality. The vehicles park in free areas in the saddle itself and also along the roads. As a result, the traffic situation is quite unclear and dangerous in the location. In the winter months of 2003, the area above Červená Studňa Lake (in the direction of the town) was cleared of snow and thus maintained for the purpose of emergency parking.

## **5. Križovatka**

Junction of the bypassing and internal roads. It is an intensively used zone – housing, bus station, parking, etc.

Location: in the SE part of the town

Characteristics:

The Križovatka area is the most busy out-of-center part of the town. Movement of traffic is the dominant function of the locality; it is crossed by the main access road to the town that is used mainly by the inhabitants of the southern and eastern parts of Banská Štiavnica (building developments Drieňová and Juh), as well as by people from the villages of the district. It is also used by workers from the eastern industrial zone (in the direction to St. Anton), from the factory Pleta-Móda that is in close vicinity of the locality, and also by all the people going to the District Office (employees and those who need the service of the office). In addition, there are several restaurant-type facilities that are certainly also visited. The locality is heavily used by cars, buses and walkers.

A main bus stop is located directly on the road. This bus station is intensively used throughout the entire day, with peak hours early in the morning and in the afternoon.

The central zone of Križovatka is lined with high-rise buildings having some strips of green vegetation in front of them. There are some official and unofficial parking lots in the locality. Maps of the town and region, including advertising information about local businesses, are located on the edge of the bust stop. These maps are, however, out-of-date.

Use:

*Arrival to the town:*

a) long-distance and regional traffic (car, bus, road bicycle):

- the locality serves as a main entrance to the town of Banská Štiavnica for visitors who come by bus. There are direct bus connections to/from the following towns/cities: Bratislava, Banská Bystrica, Zvolen, Piešťany, Žiar nad Hronom, Hontianske Nemce and Veľký Krtíš;
- vehicles coming from road No. 524 (on A. T. Sitnianskeho street) from the direction of Hontianske Nemce, Dudince and Budapest, and also from Pukanec, Levice and Bratislava;
- transit around the town from road No. 525 (on Hájik, vehicles from the directions of Bratislava and Banská Bystrica get on the bypassing road that ends on Križovatka) to road No. 524 (to Hontianske Nemce, Dudince and Budapest);

b) suburban traffic (car, bus, road bicycle):

- the locality is an entrance gate for people commuting to work from the villages of the district (there is a direct bus connection from all villages of the district to Banská Štiavnica);
- coming from road No. 524 (by A. T. Sitnianskeho street) from St. Anton, Prenčov and Beluj, partially also from other villages of the southern part of the district;

c) local traffic (car, bus, road bicycle, by foot):

- it is a starting point of all buses of the local public transport; there is a direct bus connection with all parts of the town and suburbs;
- it is a transit place for cars and walkers going from Drieňová, and other parts of the town, to the center;
- it is a transit place for cars going from the eastern industrial zone of the town to the center;

*Departure from the town:*

In addition to its use as a route out of the town (directions are described in the section *Access to the town*), the locality serves as a starting point for tourists to travel by public buses to the entire district of Banská Štiavnica.

Parking:

There are official parking lots (mainly by the largest high-rise building), but also open places used for parking in various parts of the locality. At some places, the parked cars limit the travel of pedestrians as well as other activities.

## **6. Train station**

Final station of the railway route from Hronská Dúbrava.

Location: SE part of the town

Characteristics:

The train station is located out of the town center, and it is an important traffic point of Banská Štiavnica. It is a one-line railway route with no express traffic (at the moment, there is no personal traffic at all).

The train station is a 45 minute walk from the town center. There are local bus connections from the station to the center and also to some other parts of the town.

The train station is not prepared to provide information to visitors; the necessary information infrastructure is missing.



Throughout the year, it is mainly used by local people; in the summer season, it is intensively used by the visitors of the town.

Use:

There is a direct train connection with the villages of Banská Belá, Kozelník and Hronská Dúbrava. Some of the train connections continue to Zvolen. The connections were designed to allow passengers to catch important express trains (in Hronská Dúbrava and Zvolen) from/to the directions of Bratislava, Košice, Banská Bystrica and Žilina (through Kremnica).

The train station serves as a starting point for tourists going to the vicinities of Banská Belá and Kozelník.

Parking:

There is no space designated for parking in the given locality, however, there are enough appropriate parking lots available.

Almost all of the town visitors must pass by one of the above described neuralgic points when entering the town. Except for these points, there are also other access roads that are less intensively used, but must be considered when outlining *the system of visitor flow management*. They are as follows:

## **7. Kolpašská road**

It is a road from the village of Banský Studenec to Banská Štiavnica that is mainly used by inhabitants and visitors of the village.

Location: West of the town, behind Drieňová;

Characteristics:

It is an access road to the town leading from Banský Studenec. The road is not too busy,; except for cars and buses; it is also used by people from Drieňová for short walks. In addition, it is a favored biking route.

We included this road among the important points because it is used as an access road by vacationers in Banský Studenec who usually only cross the town on their way to Banský Studenec. Later they often return to the town several times during their vacation (for shopping, sight-seeing, etc.). Therefore, it is necessary to steer the travel of visitors also on this access route. In addition, this road is used by pedestrians and bikers who come to the town from the east, from the village of Babiná (xxxx sign No. xxxx). Even though it is not very busy, this road is among the access tourist routes leading people to the town.

Use:

*Arrival to the town:*

- a) regional and long-distance traffic (bicycle, by foot):
  - from the village of Babiná in the district of Zvolen (xxxx sign No. xxx);
- b) suburban traffic (car, bus, bicycle, by foot):
  - on Kolpašská road from the village of Banský Studenec;
- c) local traffic (car, bus, bicycle, by foot):
  - on Kolpašská road going from Kysihýbel', the suburban part of the town;

*Departure from the town:*

In addition to its use as a route out of the town (directions are described in the section Access to the town), the locality serves the following purposes:

- starting point for people from Drieňová to go for short walks and trips to places west and NW of the building development;

- transit place crossed by local people as well as town visitors on their way to the famous Koplpašské lakes in Banský Studenec and the locality of Kysihýbeľ (arboretum and educational trail).

### **8. Bus stop *Under Calvary* (official name: „VÚLH“ – Forestry Research Institute)**

Used to access to the town center, it is a well located bus stop of municipal, suburban as well as long-distance bus connections.

Location: NE of the town center

Characteristics:

It is a bus stop of municipal, suburban and long-distance buses. For the purpose of accessing the town center, this bus stop is better located than the one on Križovatka (final stop of the buses and a traditional exit place for visitors) because (1) it is closer to the town, (2) visitors do not have to climb up the hill to get to the center, and (3) they pass through a more interesting environment.

The problem is, however, that some visitors know nothing about this bus stop; therefore, they do not get off the bus here and travel as far as the final stop at Križovatka. In addition, the way to the town from the Under Calvary bus stop is not marked at all, nor is there information about the bus stop on the other side of the road, from where the visitors could catch a connecting bus to the town center.

Use:

*Arrival to the town:*

a) long-distance and regional traffic (bus):

- direct bus connections from/to Bratislava, Banská Bystrica, Zvolen, Piešťany (and Žiar nad Hronom), Hontianske Nemce and Veľký Krtíš;

b) suburban traffic (bus)

- the locality is a busy entrance gate to the town used by people who commute from the villages of the district to work in the town center;

c) local traffic (bus, by foot):

- it is a bus stop of many municipal public bus connections; from here, there are direct bus connections with all parts of the town and its suburbs;

*Departure from the town:*

In addition to its use as a route out of the town (directions are described in the section *Access to the town*), the locality serves as a starting point for tourists travelling by public buses to places in the district of Banská Štiavnica.

## **B. BIODIVERSITY TEAM REPORT**

*(Katarína Králiková, et al.)*

**The report is elaborated in accordance with the Agreement on Cooperation** between the Town of Banská Štiavnica and the State Nature Conservancy of SR signed on 30 October 2002 in accordance with the Art. 51 of the Civil Code.

Annexes 1, 2 and 3 are available only in Slovak language and are attached in Slovak version of the final report.

In accordance with the agreement the outputs were achieved as follows:

1. comments concerning nature conservation on the material „Principles for sustainable tourism development“ applicable in conditions of Banská Štiavnica;  
→ *comments are stated in Annex 1 (marked with red color, in Slovak only);*
2. comments concerning nature conservation on the material “Criteria for sustainable tourism components” applicable in conditions of Banská Štiavnica;  
→ *comments are stated in Annex 2 (marked with red color, in Slovak only);*
3. comments concerning nature conservation on criteria for the educational paths on the basis of criteria stated by the German partner as the reference material for reconstruction of the educational path M. Kapusta around the Terézia vein;  
→ *comments are stated in Annex 3 (marked with red color, in Slovak only);*
4. revision of the EP M. Kapusta around the Terézia vein from the nature protection point of view as follows:
  - a) elaboration of criteria for the educational path (EP)
  - b) elaboration of a habitat categorization for the locality Červená studňa – Ottergrund, including the geographical identification of the borders, habitat description and presentation of a map (scale 1 : 1000);
  - c) elaboration of recommendations for the limitation of tourist use and recreational activities on the EP for the locality Červená studňa – Ottergrund, identification and ranging of the impacts of agriculture, forest management, etc. and tourist and recreational activities according to their importance (skiing, cycling, hiking, etc.);
  - d) elaboration of the plan/project of the EP proposal in cooperation with an interdisciplinary team including the budget proposal definition. The plan/project proposal will contain besides others also a draft of the EP stops with a short description;  
→ *the revision of the EP is stated in Annex 4*
5. list of nature protection requirements on the contents of information/interpretation center on the basis of existing analysis of “TIK” (“Turistická informačná kancelária” (Tourist Information Office) in B. Štiavnica;  
→ *the list is stated in Annex 5*
6. the strategy proposal on building up the information platform on Červená studňa, including a draft of information panels and marks contents, suitable from the nature protection point of view;  
→ *the proposal is stated in Annex 6*
7. list of the turrets paths suitable from the nature protection point of view (including detailed description), recommendation of selected nature monuments (including their description) for the image brochure;  
→ *the list is stated in Annex 7*
8. elaboration of requirements for the informative visits (study tours) to places with best practices  
→ *the recommendations are stated in Annex 8*

In accordance with the agreement (par. 4), the Statute Nature Conservation of SR identified and established a team of experts for this project as follows:

RNDr. Katarína Králiková

RNDr. Irena Bozalková

Mgr. Roman Rajtar

Ing. Pavol Polák

RNDr. Dušan Trcka

In accordance with the agreement (par. 4), the Statute Nature Conservation of SR sent representatives to the advisory committee meetings, round table meetings and other events organized under this project.

B. Bystrica, 26.3.2003

## **ANNEX 4:**

### **Revision of the M. Kapusta around the Terézia vein educational path from the nature protection point of view**

#### **Elaboration of habitats classification**

#### **I. METHODS**

The habitat classification in the EP surroundings between the stops 1 a 5 was carried out on the basis of mapping provided from 1.10.2002 to 15.3.2003. The study area was divided into the homogenous parts, which the list of plant (also with coverage according to the Tansley's scale) and animal species was elaborated for. While in the time of mapping the spring and summer species were not present in the area, those species were listed on basis of the habitat type and former records. In case that according to species composition the site should be classified as a single habitat category, the homogenous area was divided into several smaller sites. Consequently the sites were classified into single habitat categories in accordance with the Catalogue of habitats of Slovakia (Stanová, V., Valachovič, M., (eds.) 2002: Katalóg biotopov Slovenska. DAPHNE – Institute of Applied Ecology, Bratislava, 225 pp.). Classification of some particular sites was problematic due to the fact that there are rapid changes in the property and users conditions in the area and also related changes in management of particular parcels. Therefore the references to the anticipated changes in classification, which in a consequence of the succession processes came to, were referred as well. Particular types of habitats were color-marked and numbered on the map. Available databases on forests of Slovakia were used for classification of the forest habitats.

From a phytogeographic point of view study area belongs to the West-Carpathian region. It is situated in the center of the geomorphologic unit of the Štiavnické vrchy (Štiavnické Hills) as a part of a volcanic complex of the Slovenské stredohorie (Slovak Highland). The substrate is acid, built mainly by phyllites and pyroxene andesites. The soils are dry and rocky with low concentration of minerals. Due to the fact that the area is situated in the watershed of the Hron and Ipeľ rivers as well as due to an intensive mining in the past, it is practically without the water streams at all. There are 2 water reservoirs in the area – Červená studňa and Ottergrund. The habitats are of a secondary origin. Hay- and wet meadows, especially near the

stop 1, are the most valuable from the biodiversity as well as occurrence of rare and protected species point of view.

It is not possible to classify the majority of the fauna species to given types of habitats and to localize them exactly due to the overlap of several sites usually necessary for survival of the species. One can serve as a space for breeding, while the other as a feeding territory. Therefore in case of fauna species it is necessary to consider the whole study area as a one complex and their classification to the particular habitat types as only informative.

In addition, there is an important phenomenon of the study area: the Štiavnické vrchy (Štiavnické Hills) are situated on the border of the Pannonian basin and the Carpathian arc. Due to this fact, the termophilous species penetrating from the south meet with the species that prefer colder mountain environment. A diverse geological substrate increases the biodiversity of the area.

## **II. DESCRIPTION OF HABITATS**

### **A. Forests**

#### ***1. Forest stands of allochthonous tree species – X9***

In the study area only secondary tree stands occur and they consist mainly of tree species which are not native to the sites and the area. These tree stands replaced the original tree stands of the habitat categories as follows:

**a. *Luzulo-Fagetum* beech forests** (Central European acidophilous beech forests) – Ls5.2 – sites No.: 65, 80, 87, 95. They occur especially in the southern exposition of slopes with high inclination, extremely dry, rocky with an extremely acid substrate and unsaturated cambisols. The autochthonous tree species are represented with rare deciduous species (maples, small-leaved lime, common ash), beech, oak and the pioneer tree species (in total up to 50%). There is a presumption that the presence of the autochthonous tree species, especially beech and oak, can increase due to the fact they are still quite young (5 to 30 years). From the allochthonous tree species especially the European larch, spruce, silver fir as well as other introduced tree species (e.g. Douglas fir) are present.

##### Typical plant species:

*Larix decidua*, *Picea abies*, *Fraxinus excelsior*, *Picea pungens*, *Tilia cordata*, *Fagus sylvatica*, *Carpinus betulus*, *Acer campestre*, *Salix caprea*, *Betula pendula*, *Sorbus aria*, *Negundo aceroides*, *Swida sanguinea*, *Luzula luzuloides*, *Calamagrostis arundinacea*, *Avenella flexuosa*, *Polygonatum verticillatum*, *Oxalis acetosella*, *Vaccinium myrtillus*, *Hieracium murorum*, *Poa nemoralis*, *Mycelis muralis*.

**b. *Asperulo-Fagetum* beech forests** (neutrophilous beech forests) – Ls5.1 – sites No.: 13, 66, 72, 73, 77, 78, 85, 86, 88, 91, 92, 93, 96. In the study area they occur especially in the northern exposition of slopes with low inclination and rocky and acid substrate. In consequence of it the favorable soils conditions have originated here. Presence of the autochthonous tree species is 0 to 50 %; especially presence of beech and oak is very low in these stands. In comparison to it, presence of the allochthonous tree species is 50 to 100 %; the European larch, spruce, pine, silver fir and introduced tree species are the most preferred. The stands are usually managed, however, due to the enormous presence of the allochthonous tree species they are unstable and it is necessary to manage them in order to increase the presence of the autochthonous species.

##### Typical plant species:

*Pinus sylvestris*, *Larix decidua*, *Picea abies*, *Abies alba*, *Fagus sylvatica*, *Quercus petraea*, *Fraxinus excelsior*, *Acer platanoides*, *Alnus glutinosa*, *Alnus incana*, *Tilia cordata*, *Sorbus aria*, *Salix caprea*, *Betula pendula*, *Populus tremulae*, *Pseudotsuga menziesii*, *Picea pungens*, *Sambucus nigra*, *Corylus avellana*, *Ribes uva-crispa*, *Swida sanguinea*, *Crataegus laevigata*, *Carex pilosa*, *Athyrium filix-femina*, *Dryopteris filix-mas*, *Dentaria bulbifera*, *Luzula luzuloides*, *Lilium martagon*, *Polygonatum verticillatum*, *Poa nemoralis*, *Galeobdolon luteum*, *Actea spicata*, *Rubus hirtus*, *Mycelis muralis*, *Melica uniflora*, *Senecio ovatus*, *Viola reichenbachiana*, *Geranium robertianum*, *Oxalis acetosella*, *Vaccinium myrtillus*, *Avenella flexuosa*.

**c. Carpathian oak-hornbeam forests** – Ls2.1 – partially the sites No. 80 and 93. In principle, they are only fragments of this habitat type in the azonal position of the top parts of the Paradajz Hill above the occurrence of beech tree stands. Due to the extremes (southern exposition on the top of the hill, dryness, rocks, inclination, soil) the conditions are unsuitable for the occurrence of tree species typical in such elevations (beech). Therefore the oak and rare deciduous tree species, which are able to survive in such conditions, are present here. However, the stands are disturbed with an introduction of the allochthonous species. Despite of it, especially on the top of the site No. 80, the habitat regenerates naturally. The process of natural regeneration should be supported with an appropriate management of the stand.

Typical plant species:

*Quercus petraea*, *Fagus sylvatica*, *Picea abies*, *Larix decidua*, *Acer platanoides*, *Sorbus aucuparia*, *Sorbus aria*, *Acer campestre*, *Corylus avellana*, *Swida sanguinea*, *Ligustrum vulgare*, *Carex pilosa*, *Lathyrus vernus*, *Poa nemoralis*, *Veronica chamaedrys*, *Fragaria vesca*, *Campanula rapunculoides*.

**d. Unidentified autochthonous habitat type stands** – x – sites No. 68 and 74. The are stands are presented with planted allochthonous tree species. They are not listed in the forest land fund.

Fauna of forests:

The group of the butterflies represents: *Anthocharis cardamines*, *Goenopteryx rhamni*, *Pararge aegeria*, *Leptidea sinapis*, the group of beetles (Coleoptera): *Geotrupes stercorarius*, *Geotrupes vernalis*, *Necrophorus vespillo*, *Trichius fasciatus*, *Cerambyx scopolii*, *Strangalia maculata*. The group of molluscs includes common species such as *Acanthinula aculeata*, *Aegopinella pura*, *Ena montana*, *Isognomostoma isognomostoma*, *Merdigera obscura*, and also Carpathian endemic species *Bielzia coeruleans*, further *Limax cinereoniger* and *Limax tenellus*. The vertebrates are represented by a big group of amphibians and reptiles: the most common are *Rana temporaria*, *Rana dalmatina*, *Bombina bombina*, *Bombina variegata*, *Salamandra salamandra*, *Elaphe longissima* and *Anguis fragilis*. From the other groups of vertebrates special attention is given to birds. Species such as *Ciconia nigra*, *Pernis apivorus*, *Accipiter gentilis*, *Buteo buteo*, *Scolopax rusticola*, *Columba palumbus*, *Strix aluco*, *Athene noctua*, *Asio otus*, *Jinx torquilla*, *Dryocopus martius*, *Dendrocopos major*, *Dendrocopos minor*, *Sitta europaea*, *Troglodytes troglodytes*, *Pyrrhula pyrrhula*, *Fringilla coelebs*, *Parus ater*, *Parus palustris*, *Turdus merula*, *Turdus philomelos* and in the lower southern parts of the area *Dendrocopos minor*, *Lulula arborea* and *Oriolus oriolus*. In the border areas of forests *Parus major*, *Parus caeruleus*, *Garrulus glandarius*, *Corvus corone*, *Cuculus canorus* and *Pica pica* is common. The group of mammals includes *Sorex araneus*, *Sorex minutes*, *Muscardinus avellanarius*, *Glis glis*, *Lepus europaeus*, *Erinaceus concolor*, *Vulpes vulpes*, *Martes foina*, *Mustela nivalis*, *Martes martes*, *Meles meles*, *Capreolus capreolus*, *Cervus elaphus* and *Sus scrofa*.

## 2. Clearings – X1, X2

### a. Herbaceous clearings - X1 – sites No. 17, 71

This habitat type covers the top part of the site designated for skiing (on the right side of the ski lift) but this part can be defined as habitat type X4 as well. This is due to the dominance of the species typical for X1 even with a shift to the X2 type of habitat (forests) because of progressive succession in some parts of the site. Due to it they are no more suitable for skiing in a current form (owing to the increased amount of shrubs and trees more precipitation (snow) is needed as it are available for such exposition and elevation).

Typical plant species:

*Acer campestre*, *Atropa bella-donna*, *Calamagrostis epigejos*, *Carlina acaulis*, *Cirsium arvense*, *Corylus avellana*, *Crataegus sp.*, *Digitalis grandiflora*, *Eupatorium cannabinum*, *Hypericum maculatum*, *Rubus sp.*, *Rosa canina*, *Salix caprea*, *Sambucus racemosa*, *Sorbus aucuparia*, *Urtica dioica*, *Verbascum nigrum*.

### b. Shrubby clearings - X2 – site No. 70

The site (on left side of the ski lift) was used for an alternative skiing in the past. Due to abandonment the vegetation is in an advanced stadium of transformation towards the forest associations. Pioneer tree species and bushy vegetation cover the site and they form a transition to the development of acid beech forests.

Typical plant species:

*Acer campestre*, *Athyrium filix-femina*, *Avenella flexuosa*, *Betula pendula*, *Campanula trachelium*, *Corylus avellana*, *Crataegus* sp., *Euonymus europaeus*, *Fagus sylvatica*, *Fragaria vesca*, *Populus tremulae*, *Quercus petraea*, *Rosa canina*, *Rubus* sp., *Salix caprea*, *Sambucus ebulus*, *Sambucus nigra*, *Sambucus racemosa*, *Senecio ovatus*, *Sorbus aria*, *Sorbus aucuparia*, *Vaccinium myrtillus*.

## **B. Shrubs**

### **1. Pannonic wooded steppes** (Medio-European rich soil thickets) – Kr7 – sites No. 21, 82

Shrubs occur in each site of the study area and even out of sites indicated in a map, especially in the sites of habitat X4, which is followed by habitat Kr7. Habitat Kr7 itself has been mapped only in 2 sites, where the shrubs predominate. Shrubs occur on dry rocky slopes of former pastures (82), or on the slopes along the roads, respectively (21, or within the stands of the X4 habitat type). As dominant species the blackthorns, hazel-trees, elders, roses and blackberries are present. In the undergrowth the thermophilous species and species expanding from the surrounding meadows and pastures are present.

#### Typical plant species:

*Crataegus* sp., *Prunus spinosa*, *Rosa canina*, *Rubus* sp., *Sambucus nigra*, *Sambucus racemosa*, *Acer campestre*, *Corylus avellana*, *Euonymus europaeus*, *Swida sanguinea*, *Ligustrum vulgare*, *Fraxinus excelsior*, *Salix caprea*, *Brachypodium pinnatum*, *Glechoma hederacea*, *Urtica dioica*, *Veronica chamaedrys*, *Galium aparine*, *Melampyrum pratense*, *Anthriscus sylvestris*, *Poa nemoralis*, *Calamagrostis epigejos*, *Cirsium vulgare*, *Daucus carota*, *Verbascum densiflorum*, *Lepidium ruderales*, *Echium vulgare*, *Epilobium montanum*.

## **C. Meadows and pastures**

In the study area, they are the most extensive habitat types and with the highest biodiversity. In last 10 years the management of meadows and pastures strongly decreased (especially pasturing). Only the stands with relatively favorable gradient have been managed, other stands strongly overgrown. To save the biodiversity of the area it is necessary to keep the management of the stands at least at present level.

### **1. Species-rich *Nardus* grasslands, on siliceous substrates in mountain areas and submountain areas in continental Europe - *Nardo-Agrostion tenuis*** – Tr8b – habitat of European importance – sites No. 32, 41

In the area, due to the missing management of the stands and consequent succession processes, this habitat type is practically in a stage of conversion towards the thermophilous ruderal vegetation cover outside of urban areas. However, the stands were more frequent a few years ago, today they are present in the sites of X4 habitat type only. Floristically they are poor, mostly secondary pastures.

#### Typical plant species:

*Avenella flexuosa*, *Agrostis tenuis*, *Nardus stricta*, *Brachypodium pinnatum*, *Cruciata glabra*, *Dianthus carthusianorum*, *Leucanthemum vulgare*, *Thymus pulegoides*, *Lotus corniculatus*, *Luzula campestris*, *Pilosella officinarum*, *Tithymalus cyparissias*, *Viola canina*, *Veronica arvensis*, *Veronica chamaedrys*, *Ranunculus polyanthemus*, *Hypericum perforatum*, *Festuca rubra*, *Trifolium alpestre*, *Leontodon incanus*, *Linaria genistifolia*.

### **2. Lowland hay meadows - *Arrhenatherion elatioris*** – Lk1 – habitat of European importance – sites No. 2, 4, 8, 14, 18, 19, 22, 43, 45, 56, 57, 63, 90.

These meadows are mowed twice within a year and they have been preserved especially in the surroundings of Červená studňa mountain saddle, while other sites are at least sporadically mowed. On the fringes of the meadows the succession processes and overgrowing with tall grasses and shrubs has already started. The sites 2, 4, 8 near Červená studňa are the richest meadows of this type in the study area. The composition depends on degree of humidity – meadows near Červená studňa and Ottergrund (57, partially 43) are wetter

and richer in species. Together with the wet meadows they overlap and they are the most valuable stands in the area from the biodiversity point of view. The others are situated on more sunny places with a quite favorable gradient. Due to it they differ in the species composition and their biodiversity is of a lower value.

Typical plant species:

*Achillea millefolium, Agrostis tenuis, Arrhenatherum elatius, Anthoxanthum odoratum, Anthylis vulneraria, Agrimonia eupatoria, Nardus stricta, Bromus erectus, Campanula patula, Carum carvi, Cerastium holostoides, Colchicum autumnale, Crocus heuffelianus, Dactylis glomerata, Dactylorhiza sambucina, Dactylorhiza majalis, Daucus carota, Deschampsia cespitosa, Dianthus carthusianorum, Festuca pratensis, Festuca rubra, Galium mollugo, Galium verum, Geranium pratense, Gymnadenia conopsea, Knautia arvensis, Leontodon hispidus, Lotus corniculatus, Phleum pratense, Pimpinella major, Pimpinella saxifraga, Plantago lanceolata, Poa pratensis, Ranunculus polyanthemus, Ranunculus repens, Rhinanthus minor, Sanguisorba officinalis, Saxifraga granulata, Silene vulgaris, Melandrium rubrum, Taraxacum sp., Trifolium alpestre, Trifolium pratense, Veronica chamaedrys, Viola odorata.*

**3. Mesophile pastures - Polygalo - Cynosurenion** – Lk3b – habitat of national importance – sites No. 30, 33, 37, 38, 40, 47, 49, 52

The stands are extensively up to semi-intensively grazed or sometimes mowed (or mowed and then grazed). In the area, they occur on the slopes with shallow soils on acid substrates. The species composition is poor. Due to the fact that there are more suitable sites for pasturing in the area (communities of the alliance *Arrhenatherion elatoris*), the stands overgrow even more with shrubs and tall grasses and converse to the X4 type of habitat.

Typical plant species:

*Acetosella vulgaris, Alchemilla sp., Anthoxanthum odoratum, Anthylis vulneraria, Brachypodium pinnatum, Briza media, Campanula patula, Capsela bursa-pastoralis, Carex caryophyllea, Carlina acaulis, Carum carvi, Crucjata glabra, Dactylis glomerata, Dianthus carthusianorum, Festuca pratensis, Festuca rubra, Hypericum maculatum, Hypericum perforatum, Leucanthemum vulgare, Linaria genistifolia, Lolium perenne, Origanum vulgare, Pimpinella saxifraga, Plantago major, Polygala vulgaris, Potentilla erecta, Primula elatior, Ranunculus polyanthemus, Tithymalus cyparissias, Thymus pulegoides, Trifolium repens, Viola bicolor, Viola canina.*

**4. Atlantic and sub-Atlantic humid meadows - Calthenion** – Lk6 – habitat of national importance – sites No. 6, 7, 10, 50, 51

The stands are the most valuable habitats with the high level of biodiversity in the area. They are practically flooded all year long and some rare and protected flora and fauna species such as *Eriophorum latifolium, Dactylorhiza majalis, Dactylorhiza sambucina, Crocus heuffelianus* - typical for the alliance *Arrhenatherion elatoris* in the surroundings of Červená studňa, occur here. There are only fragments of this habitat type in the study area, however, due to the regular mowing they represent the valuable and rich in species associations despite of conversion to some peat habitat types of (namely Ra6 – Peatlands with high level of alkalines) - sites 6, 7, 10 near Červená studňa. The sites 50 and 51 are examples of typical humid meadows which occur in flooded depressions along the Ottergrund mining water reservoir.

Typical plant species:

*Betonica officinalis, Bistorta major, Caltha palustris, Cirsium palustre, Dactylorhiza majalis, D. sambucina, Deschampsia cespitosa, Eriophorum latifolium, Equisetum palustre, Filipendula ulmaria, Geranium palustre, Holcus lanatus, Chareophyllum hirsutum, Juncus conglomeratus, Lysimachia numularia, Lysimachia vulgaris, Mentha longifolia, Myosotis scorpioides, Potentilla erecta, Ranunculus repens, Succisa pratensis, Valeriana officinalis.*



**5. *Termophilous ruderal vegetation*** – X4 – sites No. 1, 3, 5, 9, 11, 12, 15, 16, 20, 23, 24, 25, 27, 29, 35, 36, 39, 42, 44, 46, 53, 54, 55, 59, 60, 62.

The sites are mostly steep and management (pasturing) has not been kept there so the sites have started to degrade. In addition, they are dry, nutrient poor and the soils are shallow so that the stands overgrow less rapidly and especially with the tall grasses of *Calamagrostis epigejos* and consequently shrubs and pioneer tree species. There is a presumption of further overgrowing in next years towards to shrub and forest vegetation, so the species composition will be changed also.

Typical plant species:

Alliaria petiolata, Anchusa officinalis, Artemisia vulgaris, Anthemis arvensis, Ballota nigra, Brachypodium pinnatum, Briza media, Bromus inermis, Calamagrostis arundinacea, Calamagrostis epigejos, Carum carvi, Cichorium intibus, Cirsium vulgare, Crataegus sp., Dactylis glomerata, Daucus carota, Dianthus carthusianorum, Echium vulgare, Elytrigia repens, Galium aparine, Galium schultesii, Galium verum, Geranium phaeum, Geranium sanguineum, Hordeum murinum, Hypericum maculatum, Malva neglecta, Medicago lupulina, Melandrium rubrum, Ononis spinosa, Prunus spinosa, Rubus sp., Rosa canina, Sambucus racemosa, Tanacetum vulgare, Urtica dioica.

Fauna of meadows and pastures:

Butterflies are considered to be an important bioindicative group of species: in this type of habitats occur species such as *Inachis io*, *Vanessa atalanta*, *Vanessa cardui*, *Araschnia levana*, *Polygona c-album*, *Argynnis aglaja*, *Issoria lathonia*, *Boloria dia*, *Mellicta athalia*, *Melitaea athalia*, *Melitaea cinxia*, *Papilio machaon*, *Carterocephalus palaemon*, *Adopaea lineola*, *Ochlodes venatus*, *Thimelicus lineolus*, *Colias alfacariensis*, *Colias croceae*, *Colias erate*, *Melanargia galathea*, *Maniola jurtina*, *Coenonympha arcania*, *Coenonympha pamphilus*, *Coenonympha glycerion*, *Lasiommata megera*, *Hamaeris lucina*, *Pieris brassicae*, *Pieris rapae*, *Pieris napi*, *Pontia daplidice*, *Pyrgus malvae* and *Aphantopus hyperanthus*. Meadows and pastures with shrubs and ecotones are represented with *Argynnis paphia*, *Parnassius mnemosyne*, *Iphiclides podalirius* and *Hipparchia circe*.

The group of beetles (*Coleoptera*) represents: *Potosia cuprea*, *Potosia aurata*, *Melolontha melolontha*, *Epicometis hirta*, *Rhizotrogus solstitialis* and *Anthaxia nitidula*, the group of *Cealifera*: *Oedipoda coerulescens*, *Psophus stridulus*, *Omocestus viridulus*, *Chorthippus biguttulus*, *Chorthippus longicornis*, *Chorthippus montanus*, the group of grasshoppers (*Ensifera*): *Platycteis grisea*, *Decticus verrucivorus*, *Tettigonia viridissima* and *Platycteis grisea* and the group of *Gryllodea*: *Gryllus campestris*. Molluscs: *Euomphalia strigella*, *Cepaea vindobonensis* and *Cochlicopa lubricella* are common species in the bushy vegetation of slopes with a southern inclination. In different types of habitats the species *Arianta arbustorum*, *Carychium tridentatum*, *Alinda biplicata*, *Monachoides incarnata*, *Trichia lubomirskii*, *Trichia unidentata*, *Vallonia costata*, *Vallonia pulchella*, *Vertigo pusilla*, *Vitrea diaphana* are frequent. Some of species are directly penetrating into the urban areas: *Helix pomatia*, which can be found especially in gardens and orchards, *Arion rufus* and *Arion lusitanicus*, the latter is an alien species and causes the extent damages in agriculture and gardens in case of outbreak. Reptiles are represented with *Lacerta agilis* and *Coronella austriaca*. Group of birds is quite reach and includes species such as *Alauda arvensis* and *Anthus trivialis*, *Vanellus vanellus* in the springtime, *Lanius collurio*, *Sturnus vulgaris*, *Carduelis chloris* in the bushy vegetation, *Hirundo rustica* and *Delichon urbica*, hibernants *Corvus frugilegus*, *Corvus monedula* and *Bombycilla garrulus*.

## **D. Rocks**

### **1. *Secondary scree and rocky habitats*** - Sk7 – sites No. 28, 31, 34

The sites are represented especially with the dumps from former mining activity. They are extremely poor and extremely dry on the extremely acid moving substrate. It is a habitat of the nude scree and rocks. Due to the substrate instability no mosses and lichens typical for the rocky habitats are present here.

#### Typical plant species:

*Asplenium trichomanes*, *Chamerion angustifolium*, *Chelidonium majus*, *Daucus carota*, *Dianthus carthusianorum*, *Echium vulgare*, *Sedum acre*, *Silene vulgaris*, *Tithymalus cyparissias*, *Thymus pulegoides*.

#### **2. Chasmophytic vegetation on siliceous rocky slopes** – Sk2 – habitat of European importance – sites No. 26, 58

There are only the fragments of this habitat type, poorly developed due to the small size of rocks and rocky fissures in the study area. In addition, in most cases they are secondary habitats. In comparison to the previous type, however, the cover is stable and unchanged for a relatively long time, so relatively stable plant associations have been able to develop here. The occurrence has been recorded on 2 small sites in front of and behind the stop 3.

#### Typical plant species:

*Asplenium trichomanes*, *Asplenium septentrionale*, *Cardaminopsis arenosa*, *Hylotelepium maximum*, *Polypodium vulgare*, *Sempervivum matricum*.

#### Fauna of rocks:

There are especially the old overgrowing dumps and mining adits and shafts in the area.

In the rock screes the representatives of molluscs, the most common *Mediterranea depressa*, *Cochlicopa lubricella* and *Helix pomatia*, are present. The group of reptiles is mostly represented with *Lacerta viridis*, *Podarcis muralis* and *Coronella austriaca*. The group of birds represents: *Phoenicurus ochruros*, *Erithacus rubecula* and *Streptopelia decaocto*.

Adits and shaft provide the suitable hibernating space for a huge number of bats (*Chiroptera*). In the study area the hibernation of *Rhinolophus hipposideros*, *Rhinolophus ferrumequinum*, *Myotis myotis*, *Myotis emarginatus*, *Myotis daubentoni*, *Myotis oxygnatus*, *Myotis bechsteinii*, *Myotis nattereri*, *Barbastella barbastellus*, *Plecotus auritus*, *Plecotus austriacus*, *Eptesicus nilssonii*, *Pipistrellus pipistrellus* and *Miniopterus schreibersii* has been recorded.

### **E. Fresh water habitats**

#### **1. Industrial and ornamental ponds** – Vo6 – sites No. 67, 69

The habitats developed in the mining water reservoirs Červená studňa and Ottergrund have been classified under this type. The associations of submerged and floating vegetation are poorly developed due to the small size and the yearlong management and recreational utilization of the reservoirs. Due to the fact that the Červená studňa mining water reservoir is relatively shallow (as well as unsuitable placement in the mountain saddle that causes a lack of natural inflows and the water stands all the time in the reservoir), it is in an advanced stage of eutrophication. The Ottergrund mining water reservoir is richer in number of natural inflows, which are deeper and with higher discharge as well, so it is basically without any eutrophication. The reservoir is used for watering the livestock and polluted with sediments in the summertime.

Typical plant species: *Alisma plantago-aquatica*, *Juncus conglomeratus*

#### **2. Vegetation of ruderal muddy banks** – X10 – sites No. 48, 61, 64

Only the site No. 61 is in a full compliance with the plant composition listed for this type of habitat. The site No.48 near the Ottergrund water reservoir is almost without mud and influenced by the strong water level fluctuation. The bank of the site is almost bare; only partially especially near the inflow mouths the association with a character similar to the X10 type has developed. Despite the site No.64 is a flooded spring area not situated directly along a bank, it is overgrown with ruderal vegetation of muddy banks, so it has been classified as this type of habitat.

#### Typical plant species:

*Cirsium palustre*, *Holcus lanatus*, *Chaerophyllum hirsutum*, *Chenopodium bonus-henricus*, *Juncus conglomeratus*, *Lysimachia vulgaris*, *Lythrum salicaria*, *Myosotis scorpioides*, *Ranunculus lanuginosus*, *Tusillago farfara*.

#### Fauna of water habitats:

There are especially the wet meadows, springs and mining water reservoirs presented in the study area. As the representatives of butterflies the most common are: *Lycaena dispar*, *Nymphalis antiopa*, *Apatura iris*, *Apatura ilia* and as the representative of beetles *Chrysomela coeruleans* can be mentioned. The group of the water molluscs quite often represent: *Galba truncatula*, *Radix labiata*, *Bythinella austriaca*, *Ancylus fluviatilis*, *Anodonta cygnea*, *A. anatina*, *Pisidium personatum* and *Pisidium subtruncatum* in different types of standing as well as flowing waters. As the representatives of amphibians and reptiles *Bufo bufo*, *Bufo viridis*, *Hyla arborea*, *Triturus vulgaris* and *Natrix natrix* and the representatives of birds *Cinclus cinclus*, *Anas platyrhynchos* and *Motacilla alba* can be listed.

#### **F. Arable areas – X7 – sites No. 75, 76**

The sites are situated in the surroundings of the settlement above the Ottergrund water reservoir between the stops 4 and 5. The species composition depends completely on their management (allochthonous crops are cultivated here, however non-expansive and non-invasive). The management is in compliance with the nature protection requirements; only the natural manure in adequate amounts, light mechanization or horses, respectively are used.

#### **G. Built up areas and roads – Z – sites No. 79, 81, 83, 84, 97**

In the study area, the settlements are situated only in the Červená studňa mountain saddle and above the Ottergrund water reservoir. They are sporadic settlements and gardens (above the Ottergrund) and the former forest cottage (Červená studňa). However, some uncoordinated building activities are expanding and broadening existing buildings, what is considered as unsuitable from the landscape point of view. In addition, there are roads in the study area; however, some of them are not indicated in the map as far as they are considered as a part of the habitats considered as important for this study. There are the unmanaged ruderal areas overgrowing with the bushy vegetation on the banks along the roads.

### **III. ELABORATION OF RECOMMENDATIONS FOR LIMITATION OF TOURISTS AND RECREATIONAL ACTIVITIES ON THE EP**

#### **III.1. GENERAL DESCRIPTION**

There are the management and tourist activities identified in the study area as well as on particular conditions only expected ones described in the material referred. In each section by particular activities the current status of environment, recommended measures and requirements of nature and landscape protection are described. The measures, recommendations and requirements are in accordance with the legislation on nature and landscape protection in force, i.e. the Act No. 543/2002 and the executive Order No. 24/2003, etc. as well as the practical experiences of the State Nature Conservancy of SR. The study area is situated in the center of the PLA CHKO Štiavnické vrchy and the 2<sup>nd</sup> level of protection is in force here. There is no other type of protected area here.

## III.2. DESCRIPTION OF PARTICULAR ACTIVITIES

### A. Management

#### A.1. Forest management

Current status: The forest stands in the study area are utilized as the management (economically important) forests (sites No. 66, 72, 73, 77, 78, 85, 86, 87, 88, 91, 92, 93, 96) except of forests that occur in the surroundings of the Ottergrund water reservoir, which are classified as the protecting forests (65, 80, 95) due to its soil protective function. In case of the management forests, management is provided as a small-scale-undergrowth cutting with a cutting period 90 to 110 years depending on the type of stand and regeneration period 20 to 30 years. The stands are currently 30 years old except the stand on the site No. 86 in the age of 40 and the stand on the site No. 91 in the age of 70 years. The stand composition is mostly allochthonous. In the protecting forest, management is provided as a cutting with particular selection, cutting period 150 and 210 years and the regeneration period 100 years. The stands are only 5 to 20 years old due to several windthrow disasters in last 20 years, which affected the stands due to their unsuitable composition of the spruce monocultures. Currently the composition of the stands is more diverse, however, it is still composed mostly of the species considered as allochthonous for the area of Štiavnické vrchy (Štiavnické Hills).

Measures and conditions of nature protection: The proposal is to change the management forests within the forest management plan updating process to the special-use forests (specially designated forests). These special-use forests should bear recreational function and management planning should be also adjusted to this function. For management of these forests as well as the protecting forests above the Ottergrund water reservoir we propose to promote the use and presence of the autochthonous tree species. Further to it, for the updating process of the forest management plan we propose to define the use of light forest mechanization or animals of draught, respectively, in case of interventions to the vegetation cover as well as the re-evaluation of the logging road localization. We propose to use the lighter mechanisms in case of timber transport (because of lower impact on the erosion of surface). The interventions should be executed in the non-breeding period and only the ecologically suitable technical equipment should be used. All the recommendations proposed should be incorporated in the updated version of the forest management plan in 2007.

#### A.2. Agriculture

##### a. Crop cultivation

Current status: There are fields used for the crop cultivation along the settlement above the Ottergrund water reservoir. In the cultivation processes the natural manure in adequate amounts per the area unit and in the draught horses are used.

Measures and conditions of nature protection: We propose to use exclusively the natural manure in adequate amounts and light mechanization or the draught animals, respectively.

##### b. Mowing

Current status: The meadows are mowed mechanically with tractors, rotator mowing-machines in the surroundings of Červená studňa and finger mowing-machines on the sites along the Ottergrund water reservoir. The meadows are unmannered. Only the meadows with a favorable gradient are mowed; the others rapidly overgrow with the ruderal vegetation.

Measures and conditions of nature protection: No changes in the current intensity of mowing are proposed, however, we propose to stop the use of the rotatory mowing-machines in case of Červená studňa sites. It is appropriate to mow the small areas of wet and hard-to-accessible sites manually. The meadows manuring is inappropriate from the nature conservation point of view at all. In addition to it, it is necessary to reevaluate the management of the overgrown meadows and pastures.

### *c. Pasturing*

Current status: Currently there is an extensive pasturing with sheep and goats executed in the study area, additionally with the cattle and horses along the settlement by Ottergrund. Sometimes there is a larger amount of sheep in the surroundings of Červená studňa.

Measures and conditions of nature protection: It is necessary to keep the current intensity of pasturing. An extension of cattle pasturing is considered as inappropriate as far as on the steep slopes it causes inadequate soil erosion. In case of the sheep and goat capacity enlargement, it is necessary to consider the adequacy of such activities with regard to the pastured area proportion. However, it is desired to encourage the activities on the sheep and goat capacity enlargement and to keep it in range of extensive pasturing.

### **A.3. Water management**

Current status: There are practically no natural water streams in the area. There are 2 water reservoirs Červená studňa and Ottergrund formerly used as the industrial water sources for the mineral/ore wash and for the drive of the hydraulic machines. The Ottergrund water reservoir was also used as a source of drinking water for parts of the town called Pod Paradajzom and Resla. Currently the reservoirs are without any water management utilization. There is the water-conduit from the Rozgrund water reservoir crossing the study area. The area along the Červená studňa mountain saddle in the catchment area of the Vyhniansky stream belongs to the 3<sup>rd</sup> zone of the drinking-water protection.

Measures and conditions of nature protection: The water management use of the water reservoirs is unsuitable. It is necessary to consider their revitalization as well as the revitalization of the whole system of channels formerly actively used especially in connection with the Červená studňa mining water reservoir due to the present eutrophication processes that can cause total extinction of the reservoir. In addition to it, it is necessary to keep the conditions of the 3<sup>rd</sup> zone of the drinking-water protection.

### **A.4. Mining**

Current status: The area was intensively utilized for mining of polymetallic ores and precious metals in the past. Currently it is without any mining utilization.

Measures and conditions of nature protection: It is necessary to change the rests of the mining activities, which have negatively projected to the landscape of the study area, in course of the current needs of recreation and nature protection and to adjust the historically important artifacts to increase the quality of the educational path. Potential resumption of mining activities is not recommended from the nature protection point of view.

### **A.5. Industry**

Current status: Currently there is no industrial company in the study area.

Measures and conditions of nature protection: The area is not suitable for the placement of any industrial facility. It is in conflict with the interests of nature protection.

### **A.6. Transport**

Current status: There is a state road from Banská Štiavnica to Žarnovica and to Bzenica through Vyhne crossing the Červená studňa mountain saddle. Other communications in the study area are used by their owners and the land users, illegally by visitors with the cars as well. There is no parking place in the mountain saddle, so the parking is uncoordinated and the areas of natural habitats are used as well.

Measures and conditions of nature protection: Only transport on the designated communications is recommended. The entrance is allowed exclusively to the owners and users (in accordance with the Act on nature and landscape protection) and in case of the management utilization of the locality (i.e. mowing, forest management). It is necessary to build up the parking places in the Červená studňa mountain saddle in order to prevent visitors from prohibited parking on the sites of the natural habitats and to intensify and organize the guard duties in the area.

## **B. Tourism**

### **B.1. Hiking**

*a. Educational* - (scientific tourism, educational paths and localities, getting knowledge on nature)

Current status: There is an educational path of Milan Kapusta along the Terézia vein, which is the subject of this material as well, built up in the study area. There is another educational path Staré mesto close to the Červená studňa mountain saddle with a starting point by Jankov spring. Within the site No. 90 there is a study plot of *Metasequoia glyptostroboides*. The study plot is often used for practical presentations for the students of regional colleges and universities.

Measures and conditions of nature protection: It is necessary to coordinate the study activities in the area as well as to reconstruct the paths.

*b. Sports-recreational* (hiking on the tourist marked paths)

Current status: Červená studňa mountain saddle is the starting point of several tourist marked paths that are intensively used for hiking especially in the summertime. There are several frequent tourist paths crossing the Červená studňa mountain saddle: the red-marked tourist path from Štiavnické bane to Sklenné Teplice, the blue-marked tourist path (Kmeťov path) from Prenčovo to Vyhne and Bzenica, the yellow-marked tourist path from Banská Štiavnica to Hodruša and the green-marked tourist path from Banská Štiavnica to Richňava. The last one is used especially in winter for cross-country skiing. There are the other unmarked paths used for hiking in the area as well. Hiking is provided especially in summer and weekends by unorganized smaller groups of tourists.

Measures and conditions of nature protection: The current alignment of the tourist paths in the area does not require any change. However, it is necessary to complete the paths due to the frequency of their use with the rest places and wastebaskets. It is necessary to intensify the nature protection guard duties for coordination of the tourists and to increase the tourist awareness.

### **B.2. Down-hill skiing**

Current status: There is one long ski lift (1000m) up to the top of Paradajz Hill and the downhill courses on the both sides of the lift built up in the area. The left downhill course has overgrown with trees, the right downhill course intensively overgrows and also due to the unsuitable snow conditions (0 – 10 days per season) it has been used for skiing only sporadically in last 10 years. In the lower parts of the skiing area there are two smaller ski lifts used for skiing more frequently, however, due to the unsuitable snow conditions only sporadically as well.

Measures and conditions of nature protection: From the nature protection point of view, it cannot be recommended to utilize the long ski lift and relevant downhill courses for skiing due to their localization on the steep slopes and consequent inadequate erosion in case of insufficient snow cover as well as due to their overgrowing because of a lack of management. The impacts of the smaller ski lift utilization are similar, however, it is possible to harmonize their utilization with the nature protection interests (i.e. management provided during the vegetation season). Potential building up of the large-scaled skiing centers is not in compliance with the environmental (hydrological and soil) conditions as well as nature protection interests in accordance with the legislation in force.

### **B.3. Cross-country skiing and scooter use**

Current status: Currently this is a strongly developing activity in the area. The skiing tracks are adjusted with scooters and usually align the tourist marked and educational paths. However, the activity is uncoordinated neither with nature protection nor with the other stakeholders (landowners and users).

Measures and conditions of nature protection: It is necessary to reevaluate the alignment of the skiing tracks and to restrict the tracks unsuitable from the nature protection point of view (causing an inadequate erosion and disturbance of animals). It is necessary to establish the time restriction in use of the scooters (disturbance of animals).

#### ***B.4. Motocross, moto-tourism***

Current status: They are unregulated activities that cause an inadequate noise, erosion and danger for the safety of the tourists.

Measures and conditions of nature protection: To organize the activities into the designed places outside the study area and to intensify the guard duties of nature protection and cooperation with the police.

#### ***B.5. Fruit and live organisms collecting*** (mushrooms, plants, blueberries and other berries, insects)

Current status: In the area the fruit collection is uncoordinated, orientated to the blueberries, medical herbs and mushrooms. Except the blueberries collecting the habitats are not being damaged.

Measures and conditions of nature protection: It is recommended to intensify the guard duties and to restrict the blueberries collecting (to prevent the over-collecting and use of the collecting combs). The guard duties are necessary for the case of the live organisms collecting as well (dealing in accordance with the Act on nature and landscape protection -damaging the natural habitats and collecting of protected flora and fauna species).

#### ***B.6. Natural objects collecting*** (minerals, etc.)

Current status: Unregulated collecting of minerals especially outside the study area. It causes the disturbance of the cover, the screes movement and disturbs the bats in the abandoned mine adits during hibernation.

Measures and conditions of nature protection: To intensify the nature protection guard duties and to coordinate these activities.

#### ***B.7. Picnics***

Current status: There is one picnic place built up in the study area (in the Červená studňa mountain saddle). As picnic places the meadows are used especially around the Červená studňa mountain saddle.

Measures and conditions of nature protection: It is necessary to design the appropriate places in the surroundings of the starting points of the tourist and educational paths, to build up the regulated fireplaces with prevention of illegal tree cutting and of fire expansion to the adjacent meadows and forest stands; it is necessary to resolve the waste collecting and disposal as well.

#### ***B.8. Camping***

Current status: Study area was not used for long-time camping provided by larger groups (e.g. scouts) in last 10 years. There is only short-time (1-2 days) camping provided only by smaller unorganized groups of tourists in the area

Measures and conditions of nature protection:

It is possible to approve the long-time camping for larger groups on conditions stated by the PLA Štiavnické vrchy Administration and relevant nature protection authority with determination of suitable locality (with the owner's permit and outside the meadows valuable from the biodiversity point of view), establishment of the waste facilities and resolution of other activities with a negative impact on environment.

To prevent the uncoordinated short-time camping by intensification of the guard duties and cooperation with the police.

#### ***B.9. Cyclo- tourism***

Current status: Currently there is no special cycling path designed neither in the study area nor in the Štiavnické vrchy Hills. There is a network of the tourist paths and forest roads that is used for the cycling activities. The cycling marathon with cca 50 participants in the surroundings of Banská Štiavnica is one of the annual activities; the marathon crosses the study area as well as the educational path.

Measures and conditions of nature protection: It is necessary to harmonize organizing of the marathon as well as building up of the future cycling paths with conditions of nature and landscape protection (Art. 13, para. 1b of the Act No. 543/2002 on Nature and landscape protection); to prevent the use of the network of the tourist and educational paths; to ensure a diversion of the marathon track from erosion stretches and steep slopes. In addition, it is necessary to intensify the guard duties for coordination of the cycling tourism.

### ***B.10. Recreational diving***

Current status: Currently there is no mining water reservoir utilized for the recreational diving in the study area.

Measures and conditions of nature protection: Due to the small size of the reservoirs the activity is not recommended at all.

### ***B.11. Recreational fishing***

Current status: Currently there is no mining water reservoir utilized for the recreational fishing in the study area.

Measures and conditions of nature protection: Due to the small size of the reservoirs, the activity is not recommended at all.

### ***B.12. Horse riding***

Current status: Currently provided to a negligible extent.

Measures and conditions of nature protection: It is appropriate to provide the activity outside the existing network of the tourist and educational paths as well as outside the places inclined to erosion.

### ***B.13. Building up the recreational, sporting and tourist centers***

Current status: There no special recreational, sporting, tourist center built up in the study area except the ski lifts (Section 2).

Measures and conditions of nature protection: It is not recommended to build up any of recreational, sporting or tourist centers in the area.

The assessment of influence and importance of management and tourist activities on particular habitats categories is given in the table No.1



**Table No 1: The assessment of influence and importance of management and tourist activities on particular habitat categories**

Habitat types	Forests				Clearings		Shrubs	Meadows and pastures					Rocks		Fresh water		Arable land	Buildup
Habitat categories	X9-Ls5.2	X9-Ls5.1	X9-Ls2.1	X9-x	X1	X2	Kr7	Tr8b	Lk1	Lk3b	Lk6	X4	Sk7	Sk2	Vo6	X10	X7	Z
<b>Activities</b>																		
<b>A. Management</b>																		
1. Forest management	3	2	3	1	1	1	1	1	1	1	2	0	0	2	1	1	0	1
2. Agriculture																		
2 a. Crop cultivation	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	1
2 b. Mowing	0	0	0	0	2*	1	0	2*	3*	2*	2	3*	2	3	2	1	0	1
2 c. Pasturing	1	1	1	1	2*	2	2*	3*	2*	3*	3	2*	3	3	3	3	1	1
3. Water management	1	1	1	1	1	1	1	1	2	1	2	0	0	0	3	3	1	1
4. Mining	2	2	2	2	2	2	2	3	3	3	3	3	2	3	3	3	3	3
5. Industry	2	2	2	2	2	2	3	3	3	3	3	2	2	3	3	3	2	1
6. Transport	3	3	3	2	3	3	3	3	3	3	3	2	3	3	3	3	1	2
<b>B. Tourism</b>																		
1. Hiking																		
1 a. educational	1	0	1	0	0	0	0	1	1	1	1	0	1	1	0	1	0	0
1 b. sports-recreational	2	1	2	0	1	0	1	1	1	1	1	1	1	2	1	1	0	1
2. Down-hill skiing	3	2	3	1	2	2	3	2	1	1	2	1	2	3	2	2	0	0
3. Cross-country skiing and scooters use	1	1	1	1	1	1	1	1	0	1	1	0	2	2	1	1	0	0
4. Motocross, moto-tourism	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	2
5. Fruits and live organisms collecting	2	2	2	1	1	2	2	1	1	1	1	1	0	1	1	1	0	0
6. Natural objects collecting	1	1	1	0	0	1	1	1	1	1	1	0	3	3	1	1	1	1
7. Picnics	2	1	2	1	1	1	2	1	0	1	1	0	3	3	3	2	0	0
8. Camping	2	2	2	1	2	2	2	2	1	2	3	1	3	3	3	2	0	0
9. Cycle-tourism	3	3	3	2	3	3	3	3	3	3	3	2	3	3	2	3	1	1
10. Recreational diving	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0
11. Recreational fishing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0
12. Horse riding	2	1	2	1	1	1	1	1	1	1	2	0	2	3	2	3	0	1
13. Building up the recreational, sporting and tourist centres	3	3	3	2	3	3	3	3	3	3	3	2	3	3	3	3	1	2

Evaluation categories:

- 3 - an influence causing the immediate habitat degradation
- 2 - an influence causing the gradual habitat degradation
- 1 - a negligible influence causing the habitat degradation in combination with other activities and negative factors
- 0 - without any influence
- \* - if the mowing or pasturing absents, it can be with a significant influence on the habitats present on the locality

Note: for the habitat categories see the Annex 4 b)

## **IV. ELABORATION OF THE EP PROJECT PROPOSAL**

### **IV.1. CURRENT STATUS:**

**Selection of the EP line: suitable** (for modifications proposed – see the text below and a map of the EP)

**Number of stops:** 16

**The stop localization:** in most cases suitable (for modifications proposed – see below)

**Technical conditions of the EP:** unsuitable (erosion, overgrown) especially between the stops 2 – 3 – 4 and 5 – 6

**Technical conditions of the panels:** unsuitable. The EP was built up cca 20 years ago. The panels are made of wood and the texts are almost unreadable (texts burned into the wood with short durability)

**Texts of the panels:** in general of a good quality, however too long and with some out of topic information

**Artwork of the panels:** unsuitable, out of current trend, of small fancy with too much text, not enough pictures, drawings, and maps

### **IV.2. MODIFICATIONS PROPOSED:**

**Selection of the EP line:** to change the line between the stops 2 – 3 (from the stop No. 2 around the contourline up to the stop No. 3) and 10 – 11 (an ongoing ring from the stop No. 10 to the stop No. 11 (see the map of the EP)

**Number of stops:** increase up to 18 (see below)

**The stops localization:** to move the stop No.12 (there is almost no view from the current stop due to the compact bushy vegetation), cca 30 m towards the crossroads; between the stops 10 and 11 we propose to localize 2 additional panels (see the map of the EP)

**Technical conditions of the EP:** to stabilize, clear the stretches (cut the shrubs and trees branches) especially between the stops 2 – 3 – 4 and 5 – 6

**Technical conditions of the panels:** use the wood pillars and laminate material for the panels (better resistance and readability)

**Texts of the panels:** update and completion or renewal, respectively, of some texts is necessary

**Artwork of the panels:** less text, more pictures, drawings and maps

**Proposal of the panels thematically focus on particular stops:**

1. introduction to the Červená studňa mountain saddle, the water reservoir, interpretation of the EP title, description of views and knowledge on the EP
2. flora and fauna of the EP surroundings
3. Veľká vodárenská water reservoir and mining activity in the surroundings of the reservoir
4. the metallic ore veins passing and view on the town
5. Ottergrund water reservoir
6. forest, its composition, an impact of mining exploitation
7. important mineral veins, mining technology
8. mining in the past
9. mutative forms of wood on the Terézia vein
10. open-air mining museum
11. Horná Roveň Calvary, a history
12. Klinger mining water reservoir, hereditary adit of Fr. Jozef
13. a relief connected to the mining activity, the miners work
14. volcanic caldera
15. town, its history
16. nature protection
17. surface mining on the Terézia vein
18. land utilization (mowing, pasturing)

### IV.3. THE EP RECONSTRUCTION BUDGET PROPOSAL

project of the localization of information stops constructions	20 000,-
graphic layout	90 000,-
production of the text panels	250 000,-
installation of the panels	90 000,-
production of the wood construction with shelter	270 000,-
placing the construction	180 000,-
stabilization of the path	150 000,-
surroundings arrangement	150 000,-
marking of the EP	10 000,-
Total:	1 210 000,-

### ANNEX 5:

#### **Tourist Information Office (TIK) in Banská Štiavnica** (a proposal suitable from the nature protection point of view)

#### **A. Personal availability**

- ⇒ a full-time employee of “TIK”
- ⇒ external assistants - guides

#### **Knowledge requirements on the employees (including the guides):**

- **Field of nature protection:** basic legislation on nature protection: the Act No. 543/2002 on nature and landscape protection and executive Order of the MoE SR No. 24/2003 on nature and landscape protection, especially:

- approvals and restrictions in the areas of 1<sup>st</sup> to 5<sup>th</sup> level of protection (Art. 12-16 of the Act)
  - wood protection (Art. 47 of the Act)
  - particular protected sites and trees in the area in accordance with the categories of the Act (NM, PS, protected trees)
  - species protection – Articles 32-40 of the Act (knowledge on selected taxa of protected fauna and flora and conditions of their protection, knowledge on the localities with the occurrence of protected minerals and fossils)
  - general nature and landscape protection (habitat protection, natural species composition protection (Articles 3-7 of the Act)
  - documentation of nature protection – esp. the conception materials and management plans concerning the PLA, documents of the territorial system of ecological stability
  - filing of the mineral shops that are the keepers of an exception for minerals collecting in the protected areas of the 4<sup>th</sup> and 5<sup>th</sup> level of protection and they (shops) have an approval for collecting, trading and dealing with the protected minerals or fossils (Art. 38, para. 2 of the Act and Order MoE SR No. 213/2000 on protected minerals and protected fossils and their social evaluation)
- **General information on PLA Štiavnické vrchy** (designation, natural values, small-scale protected areas, protected species in PLA, educational paths network)
- **Knowledge of language** (English, German)
- **Good communication skills**
- **PC knowledge**

## **B. Material facilities**

### **⇒ promotion and information printed materials**

- maps of the PLA (with an indication of the small-scale protected areas and educational paths, description of special protected parts of nature and landscape and basic rules for visitors)
- tourist maps of the Štiavnické vrchy (Štiavnické Hills)
- brochures/leaflets with general information on the PLA (including the mining attractions)
- brochures/leaflets on small-scale protected areas within the PLA (with general information on protected areas including a notification on the necessity of relevant approvals and exceptions for particular (expected) activities)
- set of the postcards about the PLA
- guides on the educational paths/localities
- brochures/leaflets focused on conservation of protected flora and fauna species (of national and European importance), the proposed protected bird areas (i.e. special protected areas SPAs) and the areas of European importance (special areas of conservation SACs)– Natura 2000 sites
- posters (PLA, protected species...)

⇒ promotion **video films** on the natural values of the area

⇒ **exposition/exhibition** (focused on presentation of protected areas, conservation of protected species, traditional settlement, land utilization, regional interests and attractions)

⇒ **souvenirs**

## **C. Technical facilities**

⇒ information panels (with a map of the PLA, small-scale protected areas, protected species, etc. including the foreign-language version)

⇒ bookshelves for the information materials

⇒ sitting area for the visitors (table, seats)

⇒ audio-visual technical equipment (TV, video)

⇒ PC (for the visitor's needs)

⇒ phone, fax

⇒ copying machine

## **D. Services offered**

⇒ providing information (through an employee and PC) on: nature protection, actual expositions and exhibitions, actual conservationists actions, the map of the PLA, selected protected sites, description of nature protection subject, etc., basic projects of the PLA Administration, interests, attractions and uniqueness of the PLA (recommendations on visits of particular places by season as well), educational paths...

⇒ excursion (with a guide)

⇒ souvenir and promotion materials sale

⇒ vending machine (coffee, drinks)

## **ANNEX 6:**

### **Červená studňa – building up the information platform** (a proposal suitable from the nature conservation point of view)

#### **A. Building up the facilities for visitors:**

⇒ small parking place

⇒ picnic place (garden house, fireplace)

⇒ waste baskets

⇒ wooden benches

⇒ WC box

Outlines for building up the facilities:

- to build up only small simple objects
- to use only the natural materials (from local sources)

### **B. Information system**

⇒ direction signs to other tourist paths

⇒ information panels (3)

⇒ „educational locality“

Framework contents of the information panels

1. tourist map of the Štiavnické vrchy (Štiavnické Hills)
2. an introduction panel - stop No.1 of the Milan Kapusta around the Terézia vein educational path with a map of the path and basic information on the type of EP, number of stops, path length, elevation, time required, difficulty of the path, pictograms of restriction, color of the EP (as marked in terrain)
3. a panel with a map and information on current visitor's localization, accessible places, what is possible to see on the path, indication of observation points including the description of views and indication of picnic places

„Educational locality“ focused on getting knowledge on local rock materials, e.g.:

- quiz program [principle: a big stone (cca 5-6), metal label on the rock (basic description of the rock is hidden under the label)]
- an information panel focused on a geological structure of the Štiavnické vrchy (Štiavnické Hills)

It is possible to visit the locality without passing the EP as well.

### **C. Hydrological regime adjustment**

- the mining water reservoir reconstruction
- supply channels revitalization (with utilization of a traditional technology for building the mining water reservoirs)

## **ANNEX 7:**

### **Proposal of the tourist paths in the model area and wider surroundings suitable from the nature conservation point of view for an “image” publication**

#### **A. Educational path of Milan Kapusta around the Terézia vein**

**Protected area:** PLA Štiavnické vrchy

**Geomorphological area:** Štiavnické vrchy (Štiavnické Hills)

**District:** Banská Štiavnica

**Cadastral area:** Banská Štiavnica

**Starting point - access:** Červená studňa mountain saddle – 3 km from Banská Štiavnica, 50 m from the state road Banská Štiavnica – Žarnovica. Starting point is accessible by car as well (parking in Červená studňa)

**Tourist attractions:** mining water reservoir Veľká vodárenská (a view from the EP) – has been used as a reservoir of drinking water for Banská Štiavnica since 1510 as well; mining water reservoir Ottergrund – the most high-leveled reservoir in the Štiavnické vrchy (Štiavnické Hills); marks of old mining of gold and especially silver on the mineral silver vein Terézia (prospecting pits, prospecting pit fields, caved chimneys,

spoil heaps, dumps, rainwater-supply channels), quartzite deposit (Šobov) (a view from the EP) with an occurrence of typical quartzite crystals in the shape of dove-cot. The mining activity records are completed with extensively managed meadows and pastures with scattered settlement, as well as forests changed due to an intensive cutting of wood. Kalvária on Horná Roveň offers sensitive solutions of land utilization (stop No. 10).

**Number of stops** (with information panels): 16

**Length:** 6.1 km

**Time required:** 2-3 hours

**Elevation:** 80 m

**Difficulty of the path:** the path is not difficult, suitable for hiking, cross-country skiing

### **B. Educational path Sitno**

**Protected area:** PLA Štiavnické vrchy, NNR Sitno

**Geomorphological area:** Štiavnické vrchy (Štiavnické Hills)

**District:** Banská Štiavnica

**Cadastral area:** Ilija

**Starting point - access:** meadow Tatárska lúka under Sitno cca 2 km from the bus station of the Počúvadlo recreational area, the path is a part of a marked tourist path

**Tourist attractions:** “rocky town” with huge andesites with height up to 50 m, an observation tower built on the top of Sitno in 1727; marks of settlement and fortification from the late Bronze Age; an occurrence of protected flora and fauna species; natural beech, oak-beech and forests on screes with various wood composition and close to natural type of forest structure.

**Number of stops** (with information panels): 13

**Length:** 3 km

**Time required:** 2 hours

**Elevation:** 150 m

**Difficulty of the path:** medium, suitable for hiking only

### **C. Botanical garden in Banská Štiavnica**

**Category:** Protected Site

**Geomorphological area:** Štiavnické vrchy (Štiavnické Hills)

**District:** Banská Štiavnica

**Cadastral area:** Banská Štiavnica

**Area:** 3.55 ha

**Altitude:** 580 – 630 m

**Starting point - access:** Banská Štiavnica (NE part of the town), in the premises of colleges’ historical buildings

**Tourist attractions:** botanical garden was designated as a protected site in 1958 but it was established in 1807 – 1810 for studies of allochthonous wood species acclimatization and teaching purposes. It compounds mainly different wood species (more than 300 taxa) coming from 6 floristic areas: Euro-Siberian, China-Japanese, West-Asian, Central-Asian, Mediterranean, Atlantic, North American and Pacific North American. *Sequoiadendron giganteum* is considered as one of the most important wood plants in the garden.

There is an information panel for visitors in front of the garden entrance. Wood plants are marked with labels.

### **D. Banskoštiavnická kalvária**

**Category:** Protected Site

**Geomorphological area:** Štiavnické vrchy (Štiavnické Hills)

**District:** Banská Štiavnica

**Cadastral area:** Banská Štiavnica

**Area:** 5.34 ha

**Altitude:** 726 m

**Starting point - access:** Banská Štiavnica

**Tourist attractions:** basaltic volcano (basanite), which strikes through surrounding andesites as the youngest volcano. The baroque religious buildings from 1744 – 1751 represent the cultural-historical value of the area. There is a panoramic view to the caldera of Banská Štiavnica from the top of the Calvary.

### **E. Kamenné more stone field**

**Category:** Nature Reserve

**Geomorphological area:** Štiavnické vrchy (Štiavnické Hills)

**District:** Žiar nad Hronom

**Cadastral area:** Vyhne

**Area:** 13.30 ha

**Starting point - access:** on the path of A. Kmeť in the village of Vyhne to turn to the north and continue by the green marked tourist path up to the NR

**Tourist attractions:** the most extensive stone field in the volcanic part of the Carpathians situated in the bottom of the Kamenná Hill. It represents destruction of volcanic rocks that are under the pressure of weathering; rocks are sorted by the Earth gravitation and moved to the slopes above the village and create the rock flows of rhyolites. It is an important locality of several protected flora and fauna species, especially reptiles (e.g. *Podarcis muralis*).

### **F. Vyhniansky travertine**

**Category:** Nature Monument

**Geomorphological area:** Štiavnické vrchy (Štiavnické Hills)

**District:** Žiar nad Hronom

**Cadastral area:** Vyhne

**Area:** 0.36 ha

**Starting point - access:** road from Bzenica to Banská Štiavnica; in the beginning of the Vyhne village to turn to the right behind the building of Pohronské strojárne and continue cca 50 m up to the tennis-courts under the thermal swimming-pool

**Tourist attractions:** the karst phenomenon in the tertiary vulcanites, an active tufa hill 3.5 m high and outstanding 4 m from the slope, which is formed from thermal mineralised water flowing out from an abandoned adit (187 m long, dug in the 19<sup>th</sup> century); the waterfall with the height 3.5 m is the part of the NM; protected and rare species fixed to the calcareous substrate occur in the area.

(Note: NR Kamenné more stone field and NM Vyhniansky travertine are interconnected with the educational path built by the village with the starting point at the Vyhniansky travertine)

### **G. Tourist path (red mark):** Banská Štiavnica - Klinger – open-air mining museum

**Access to the red mark:** Banská Štiavnica by the tobacco factory

**Elevation:** 140 m

**Time required:** 45 min

**Difficulty of the path:** it is not difficult, suitable for hiking

**Tourist attractions:** open-air mining museum (there are several technical objects on the surface, e.g. mining tower, hoisting machine, machine house that documents different ways of mining and ore processing; a subsurface part is situated in original mining areas, i.e. in the Bartolomej adit and the Ondrej shaft; Žigmund shaft; water reservoir Klinger - situated in the SW from the historical center of Banská Štiavnica is used for the summer (swimming, sun-bathing) and winter (skating) recreation.

## **H. Tourist path (red mark):** Červená studňa – Tanád – Veterné sedlo – Richňavské lakes

**Access to the red mark:** Červená studňa mountain saddle – 3 km from Banská Štiavnica, 50 m from the state road Banská Štiavnica – Žarnovica. Starting point is accessible by car as well (parking in Červená studňa)

**Elevation:** 180 m

**Time required:** 2-3 hod.

**Difficulty of the path:** medium, suitable for hiking, cross-country skiing

**Tourist attractions:** view on the central part of the Štiavnické vrchy (Štiavnické Hills), mining water reservoirs (Dolný Hodrušký, Rozgrund, Veľká vodárenská, Červená studňa, Tajšok, Bačomi, Evičkino, Vindšachtovské, Malé and Veľké Richňavské) and mining settlements (Banská Štiavnica, Štiavnické bane, Štefultov, Vysoká, Kopanice, Hodruša); marks of old mining and mining relief elements (prospecting pits, caved chimneys, spoil heaps, dumps, rainwater-supply channels), complex of forests and clear cuttings; Kalvária (Calvary) above the village of Štiavnické Bane

## **I. Geologic-geomorphological attractions:**

**Banská Štiavnica – Staré mesto (Glanzenberg)** – an important anthropogenic artefact (surface mining, dumps, prospecting pits, prospecting pits fields) that originated in a consequence of intensive surface exploitation as well as underground mining at the Špitalér vein

**Starting point:** from Banská Štiavnica (Úvozná St.) or from Červená studňa mountain saddle, respectively

**Šobov** – the rests of morphological interesting quartzite rocks on Šobov that are the residuals of famous rock panorama above Banská Štiavnica, a mineralogical locality

**Starting point:** from Hájik mountain saddle

The paths mentioned above are not a part of marked tourist paths; they are intended for expert public and require an expert guidance.

## **ANNEX 8**

### **Subject proposals for the “study tours”**

- practical implementation of tourism in the protected areas
- tourist information system in the protected areas
- ways of protected areas utilization for tourism
- a long-term protected areas utilization for tourist
- care for the tourist paths, tourist information system, marking management... in the protected areas
- nature protection limitations for tourism
- the most negative impacts of tourism on environment
- ways of businessmen and other stakeholders involvement in nature conservation in the protected areas
- ways of financing of tourism in the protected areas



## **C. CRITERIA OF THE TOURISM FACILITIES IN BANSKA STIAVNICA**

*(Edited by Ján Roháč)*

### **I. Introduction**

The goal of the Regional Certificate in Banská Štiavnica (RCBC) is to introduce the idea of sustainable development of tourism in the region of Banská Štiavnica. The RCBS have been developed based on criteria that are part of other certification systems (mainly the German VIABONO system). The truth, however, is that the standard certification systems are frequently too ambitious and difficult to implement in the conditions of the Slovak Republic (e.g. because of legislation, high tax and levy charges, bureaucracy, etc.). As a result, the owners and managers of various facilities feel discouraged from doing this type of work. Therefore, the goal of regional certification in Banská Štiavnica is to implement a certification system that will not be as ambitious as the certification systems in the world, however, it will lead the businessmen (who decide to meet its criteria) towards more environmentally friendly approaches and better quality management of their facility. After getting familiar with the advantages and disadvantages of this basic certification, they may apply for certificates of higher level.

The RCBS may become a tool for municipal administration (other local administrations) that can be used to improve the quality of service provided in the town and its surroundings. The Town Hall (other local administration offices) may decide that in addition to supporting tourism and activities that promote the town, or other appropriate activities, they will co-operate mainly with the certified facilities. This could motivate the businessmen to apply for such certificate.

Based upon the extensive discussions that were held about the regional certification in Banská Štiavnica, but also in other regions, we have decided to develop criteria with an easier structure. The main reason for adopting this decision were our concerns that the too complicated and strict criteria would discourage those who are interested.

Detailed specifications were developed only for the group of criteria "Care of the environment". The purpose of this step was to indicate how comprehensive the next level of criteria could be, if the local authorities decided to implement it in the future.

### **II. Basic criteria**

The Regional Certificate in Banská Štiavnica consists of three main groups of criteria:

#### **A. CARE OF THE ENVIRONMENT**

#### **B. CARE OF THE CUSTOMER**

#### **C. SUPPORT OF THE REGION**

<p><b>A. CARE OF THE ENVIRONMENT</b> (for this group, we have prepared a more detailed specification – see part III. <i>Detailed Criteria</i>)</p>
<p><b>A.1. Energy saving:</b> The facility makes use of energy-saving procedures and technologies, including mainly: regulation, isolation, responsible human behavior and use of renewable sources. The energy saving concerns water warm-up, heating, lighting, and use of electrical energy and gas.</p>
<p><b>A.2. Waste management:</b> The facility implements procedures and technologies that decrease the amount of waste and improve its composition for its further use or disposal. The amount of waste is decreased both at its source (appropriately packed goods are selected, suppliers who limit packaging are preferred, etc.) and in the facility itself (responsible behavior, lower consumption, separation, etc.). The amount of waste is decreased in all operation units and for all activities of the facility (cooking, accommodation, administration, etc.)</p>
<p><b>A.3. Water supply management:</b> The facility implements procedures and technologies that decrease the volume of used drinking water, waste water and its pollution. This applies to all activities and each part of the facility (cooking, accommodation, administration, maintenance, etc.)</p>
<p><b>A.4. Transportation:</b> The facility management looks for appropriate ways to encourage both the guests and personnel to use public transport and individual non-motor driven means of transport, whenever possible. Especially travel by foot, bike and public transportation (train, bus) are supported.</p>
<p><b>A.5. Architecture:</b> If new constructional designs, reconstruction, adjustments, etc. are proposed, the architectural image of both the town and the close surrounding of the facility are considered. The amount of land taken, or its inappropriate use are minimized, local traditional materials are used and original volumes preserved. The natural and local green is preferred for planting.</p>

<p><b>B. CARE OF THE CUSTOMER</b></p>
<p><b>B.1. Noise:</b> measures to decrease noise from car traffic are implemented (e.g. speed limits, isolating parking lots from the accommodation part, etc.); drivers of supply vehicles and waste disposal vehicles turn off engines while loading or unloading; pieces of equipment that produce noise, thus bothering the guests in commonly used sections but also in rooms (noisy engines, ventilators, compressor refrigerators, etc.), are removed (replaced); noisy construction, maintenance and service works are limited to the most appropriate time of the day, and this limitation is strictly followed; pleasant music is played in public sections on a soft degree of loudness;</p>
<p><b>B.2. Option possibility:</b> the guests may decide that they will reuse the towels and bedding; the facility is primarily non-smoking, smoking is allowed only in reserved sections and rooms; management of the facility applies appropriate ways to ask the guests to economize the use of water in the rooms and bathrooms (small cards, leaflets, etc.); management of the facility encourages guests to inform the reception about the assumed time of their return with a purpose to economize the heating;</p>
<p><b>B.3. Hospitality:</b> the personnel of the facility is friendly, patient, helpful, smiling and meeting all the essentials of pleasant approach to the client; guest in the restaurant shall not wait for the first contact for more than 2 minutes, guest in an accommodation facility shall not wait for the first contact with the receptionist for more than 30 s, or instructions in various languages on how to check-in (if non-permanent reception is the case) are visibly installed;</p>
<p><b>B.4. Well-being of guests:</b> services to ensure physical and spiritual well-being are provided for guests (fitness center, room for reading, etc.); activities for children are offered (play section, playground, programs for children, etc.); baby changing stations are placed in bathrooms; special activities are offered in the case of bad weather; the needs of handicapped, diabetics, people suffering from allergy and vegetarians are respected, and adjustments are adopted to satisfy them in the facility;</p>
<p><b>B.5. Information web-page about the facility:</b> the facility has a simple and not expensive page on the internet that provides all the important information (facility's address and location, opening hours, menu, orientation of rooms, etc.); the page is linked with other pages in the region, as convenient; the page is regularly updated, it does not contain data that are not valid or correct;</p>

### **C. SUPPORT OF THE REGION**

**C.1. Co-operation with local suppliers:** if possible, goods and services from local suppliers are preferred, and the guests are informed about using them;

**C.2. Selling local products:** local products are sold in the facility; the clients are informed about regional products, where and how are they produced, and also about places to buy them (restaurants, handcraft workshops, shops with local art and handcraft products); traditional meals from the Banská Štiavnica region are included in the menu of the restaurant;

**C.3. Information about the region:** basic information about the region may be acquired in the facility (e.g. information panel with statistical data, important telephone numbers, opening hours in shops, museums, etc.); information materials about tourist offers and services in the region are freely accessible in the facility; book-guide and map of the region may be purchased in the facility; the facility offers/makes access to guided tours of the town or region;

**C.4. Registration and seat (company's headquarters) of the facility:** the facility's headquarters is seated in the region/town, i.e. the taxes paid remain in the region/town; the managers of the facility have enough authority to adopt decisions mainly in the fields of marketing and co-ordination of activities in the region;

**C.5. Membership in the regional tourism association (if exists):** the facility is a member of a regional tourism association; such membership makes the marketing of the region and the co-ordination of its tourism offers more effective;

## **III. Detailed Specifications**

### **A. Care of the environment**

#### **A.1. The facility implements energy-saving procedures:**

- a) Regulation: heating and hot water meters are used (e.g. thermostats in rooms, timers and program switches); effective heating and water warm-up (or maintaining the temperature) system is implemented; the temperature of hot water does not exceed 50<sup>0</sup>–60<sup>0</sup>; energy-saving equipment and machines are used; rooms and halls are not overheated;
- b) Isolation: heat isolation of walls, roofs, floors, water tanks, pipelines and boilers is installed; double screens are used in windows;
- c) Responsible human behavior: electronic hand-dryers are replaced by regular towels (not paper); heating in buildings and rooms is reduced in the times when empty; televisions and radios are turned off when nobody is around; stand-by modes of computers and televisions are not used, instead they are turned off;
- d) Renewable sources: renewable sources of energy for heating, water warming, etc. are used (e.g. solar energy, wind power, biomass, etc.)

#### **A.2. Appropriate waste management**

- a) Decreasing the amount of waste at its source: the facility prefers to use products with limited packaging and co-operates with suppliers who provide such products; the facility prefers to buy goods in returnable packaging; the facility chooses to buy goods in other than plastic packaging;
- b) Decreasing the amount of waste on the site: individual food portions (e.g. sugar or honey in small separate packages, etc.) are not used; disposable silver wear and dishes are not used; garden and kitchen waste is composted; food waste is provided for animal feeding (e.g. for dogs, pigs, etc.); returnable packaging and bottles are returned; individual items of hygiene in rooms are replaced by containers that can be refilled; packaging is reused wherever possible (e.g. containers for packing food, glass bottles, linen, etc.); re-cycled material is used (e.g. recycled office paper, reusable ink cartridges for printers, etc.); both sides of a paper sheet are used for printing; if text is printed on one side of the paper, it is not put to garbage but used for making copies or work printouts;
- c) Separating waste: waste is separated in the facility (i.e. individual containers e.g. for glass, plastic

and paper waste are provided);

### **A.3. *Appropriate water-use management***

- a) Decreasing the consumption of water: rainwater or treated waste water are collected and reused for irrigation, toilet flushing or other technical purposes; water-saving equipment is installed in toilets and bathrooms (e.g. pressure flushing valves, volume reducers in toilet cisterns and urinals, aerators, low flow showerheads, etc. are installed in bathrooms); water-saving procedures are used in operation units (e.g. when washing dishes in the kitchen) and for maintenance (e.g. when cleaning);
- b) Decreasing water pollution: the facility is connected to the public sewerage or it has its own waste tank that is regularly emptied; in camping grounds, caravans are allowed to empty their waste tanks to sewerage or the campground's waste tank; natural or degradable detergents/materials are used for cleaning and disinfecting; detergents and other materials are used in appropriate amounts, no wasting is permitted;

### **A.4. *Transport***

- a) Promoting travel by foot: tourist maps and orientation plans can be purchased in the facility; if trips are offered, walking/hiking trips should be included in the offer; in the facility, information is provided about: public transport (bus/train schedules, connecting buses/trains), existing hiking trails, excursions, guided or not-guided trips and places to buy tourist maps;
- b) Promoting travel by bike: bikes can be rented (or rental arranged) in the facility; bike maintenance, including spare parts and equipment, is provided in the facility; the facility provides a safe place for storing bicycles, also small repairs and cleaning of bicycles is available; there are stands placed in front of the facility that make possible to lock the bicycle frame; biking maps are provided for purchase in the facility; information about (i.) bicycle routes, (ii.) guided/not guided bicycle trips, and (iii.) places to buy biking maps may be acquired in the facility; if trips are offered, bicycle trips should be included in the offer of the facility;
- c) Promoting public transportation: recommendations are provided about convenient bus and train connections for departures from and arrivals to the facility (including changes); information about public transport can be acquired in the facility (schedules, connections); transportation service is provided to guests arriving by means of public transportation (e.g. driving to/from train station, etc.); some personal benefits are offered to guests using public transport; if trips are offered in the facility, trips that use the means of public transportation should be included in the offer; the employees who travel to work by using public transport have their travel costs fully or partially reimbursed, or they are given some other benefits by the facility management;

### **A.5. *Architecture:***

- a) Town-planning point of view: buildings and other structures are designed/reconstructed the way that they respect the landscape scenery; the land take-in is minimal; the surface of parking lots, playgrounds, sidewalks, etc. makes water infiltration possible;
- b) Material used: when building or reconstructing, typical local architectural and constructional elements and designs are implemented; when building/reconstructing buildings or furnishing their interiors, natural materials (e.g. wood) are used to maximal extent; when reconstructing buildings, original items (e.g. walls, floors, ceilings, etc.) and details (windows, doors, plasters, remnants of original walls, etc.) are preserved; when changing or maintaining the interior or exterior parts, environment-friendly materials are used (e.g. wooden furniture, wooden information desks and children playgrounds, instead of plastic, etc.); no volatile organic compounds (VOC), formaldehyde and asbestos are used in interiors;
- c) Greenery: the existing trees and bushes are preserved when implementing changes; only trees and bushes typical for the given locality are planted; climbing greenery is planted to cover the walls and fences; the gardens and other areas are planned and maintained in a natural way and in compliance with the requirements of environment protection (e.g. keeping the wild-growing bushes and trees, providing sufficient space for each plant to grow, limiting the use of artificial and mineral fertilizers, composting vegetable waste, etc.); no artificial flowers and plants are used in the facility and its surroundings.

## **D. PLANNING OF TOURISM INFORMATION CENTER**

Abstract of the Municipal Tourist Information Center – Design Proposal

*(Peter Nižňanský)*

*The complete project, including drawings and technical documentation, may be found in the archive of the Amber Trail Association, Banská Štiavnica.*

### **I. Goals of the project**

Within this project, a design proposal (mostly interior) of the Municipal Tourist Information Center (hereinafter MTIC) is prepared. The MTIC is located on the ground-floor of the Rubigall house, Holy Trinity Square in Banská Štiavnica. In addition to having a room for providing information over the counter, the following rooms are proposed to be equipped: (1) an interpretation room with a purpose to present the region, (2) back office for employees doing activities of conceptual character (not in face-to-face contact with visitors), and (3) seminar room.

### **II. Spatial arrangement**

The MTIC will consist of the following rooms:

- Entrance hallway (mazhaus) – it is shared by all operation units in the building. Simple information panels may be placed here.
- Information room – it is designed for providing information to visitors. There is an information counter for two employees with enough space for placing small items on the inside part of the counter. Behind the information counter, there is a small office desk, a stand for multifunctional equipment, cabinets, shelves and other required equipment. In the other part of the room, there are open shelves where free materials may be placed. Two maps (town + region) are installed on the wall and a small table with a computer (access to internet is provided to visitors) is placed in the corner of the room. Also, simple chairs for short sitting are available in this room. A touch screen accessible from outside of the building is located in the window.
- Kitchen is located in the room that can be entered from behind the information counter. It will be used by the employees and also during events held in the seminar room. From the kitchen, it is possible to enter another room:
- Storage of promotion materials / Luggage room – this room can be also entered from the hallway.
- Interpretation center – exhibition room that is created after a larger room is divided.
- Storage of exhibition panels – it can be entered from the interpretation center, and serves the purpose of storing panels and other items used in the interpretation center.
- Back office is located in the same room as the interpretation center. It is separated from it by a wooden wall, in some parts with glass filling. There are two desks and a small meeting section in the office. Also, office equipment and storage areas are arranged in the room.
- Seminar room – it can be entered either from the interpretation center or directly from the hallway (mazhaus), i.e. its operation does not depend on the MTIC. Its internal arrangement is not determined by furniture; it can be flexibly changed. There are stackable tables and chairs and presentation equipment (locked in a cabinet on wheels) available in the room. To air the room, there is ventilation equipment placed under the ceiling and mouthed through window to courtyard.
- Mining tunnel leads from the seminar room and it is an interesting space. However, it needs to be walled on its end to prevent cold and humid air drift. On the side of the seminar room, a glass door is designed that makes it possible to have a look into the lit tunnel.

- Hygienic facility – the employers of the MTIC may temporarily use the bathrooms that are on the first floor, in the Town's Cultural Center. After reconstructed and opened for public (not part of this project), they will be able to use the bathrooms that are on the ground floor.
- Terrace of a medium size is located in front of the MTIC and serves the purpose of both relaxation and meeting point for people. The touch screen that is in the window of the MTIC can be accessed from the terrace.
- 3D poster structure is placed in front of the MTIC on the side walk (on the right from the entrance).

A portable wooden ramp is used upon request to make the MTIC handicapped accessible.

### **III. Description of the current technical and constructional condition of the facility**

Not too long ago, the rooms were used as a disco bar and this has left its marks on the interior: partially damaged floor and wall plasters, and smoky plasters, due to insufficient ventilation, especially in the back room (where the interpretation center and back office are planned).

### **IV. Constructional works**

(complete list and descriptions are provided in the report).

In the rooms of the MTIC, the following works will have to be completed:

- to rebuild some parts of the floor;
- to put new plaster on some sections;
- to build a new wall;
- to pull down a wall section for door opening;
- to build a niche in the original door opening;
- to build one door and adjust one window opening;
- to build a new terrace and create a 3D poster structure.

The current windows and doors will be kept, but some of them need to be repaired.

### **V. Technical works**

Detailed proposals/projects of technical works are not part of this project; they need to be prepared by specialists.

- Electrical wiring – will have to be reconstructed to great extent;
- Lights – proposed only as a suggestion, the final proposal must be made by a specialist;
- Heating – the current heating system may be used temporarily, but must be reviewed by a specialist. The heating system in the interpretation center must be yet designed.
- Water supply and sewerage – no adjustments are required; hot water supply for the kitchen is ensured by the instantaneous water heater;
- Ventilation technology – the ventilation system for the seminar room and kitchen needs to be designed.

### **VI. Description of the interior of rooms**

In this part, a complex list of furniture (producer, catalogue number and current price are included, if available) and other details are provided. This is available only in Slovak language.

## **E. PLANNING OF THE CERVENA STUDNA SITE**

### **I. The report of architects**

*(Peter Mravec, Richard Murgaš)*

#### **I.1. Analysis**

##### *Localization*

Proposed locality of the Červená Studňa mountain saddle is located in the northwestern position opposite the urbanized area of Banská Štiavnica, at 790 m above sea-level. There is a artificial water reservoir of the same name in the close surroundings in the southeastern direction towards the valley sloping down to the historic core of Banská Štiavnica.

##### *Transport accessibility*

The crossroad of the state roads of the III. category of Y-shape is located in the Červená Studňa site: from Banská Štiavnica to Hodruša-Hámre 06518 and to Bzenica 06517. The road 06518 forms the naturally shortest connection on the Banská Štiavnica – Bratislava route. Three marked hiking trails, two nature educational trails, one scout trail, cycle route and several non-marked but utilized pathways are meeting in the site and approach roads.

##### *History*

The water reservoir Červená studňa was built before 1765 as a part of the water management system of reservoirs and canals in the surroundings of Banská Štiavnica, used mostly for mining purposes. This reservoir was connected with the Veľká and Malá Vodárenská water reservoirs and it was used as a source of drinking water to supply the inhabitants of Banská Štiavnica later. Then it served for recreation and at present it is under not-finished reconstruction.

##### *Evaluation of the territory*

Cervená studňa site lacks the essential capacities for proposed needs. Today it is only a place of low importance where several routes cross and where crossing of roads and trails makes comfortable entry to the open space. The function of the reservoir is completely suppressed by low water level due to non-operating bottom outlet. Moreover, due to absence of any structuring of the territory, its utilization is almost completely unrestrained. In spite of these conditions the locality is permanently overloaded particularly by tourism and recreation and by timber transport and logging activities.

##### *Problems*

Main problem regarding to passenger transport is a arrangement of static transport (parking) in accordance with the traffic rules and standards, full-value entries to the open space and not-disturbed views. Current parking areas right on entries to the landscape, on the shoulder and directly on the road-crossing practiced now cannot be admitted. With regard to freight service or transit of timber respectively, the unequivocal conflict is represented by situating of the exit communication and the hauling point right in the center of the proposed area entry. It is necessary to arrange the site, to do away with dual tracing and to define discrete bases for individual functions and directions as a part of guidance to individual routes. The area has to be supplied with a basic orientation system. It is necessary to install here also an information system corresponding at least with the central European context.

## *Requirements*

Červená Studňa is identified as one of the neuralgic points of Banská Štiavnica and its surroundings. Therefore it is necessary to arrange its informative function appropriate to the third millennium together with renewal of the original values of the given area with regard to functional, spatial and compositional requirements preserving the genius loci.

## **I.2. Synthesis**

### *Idea*

The main attribute of the Červená Studňa area arrangement is basic hierarchization of the space and potential functions with regard to its own position and specific problems. Any approaches to urbanize the given area are absolutely inadmissible at this stage. This proposal suggests new material and spatial arrangement determined by the offered potentials, conflicts and barriers.

### *Solution of movement*

Determining factor of proposed arrangement of the locality where a lot of roads/trails are meeting is an organized arrangement of the walking, passenger, freight and static transport. All well-known and simply accessible walking routes, used for centuries, are fully preserved as well as direct connections to all hiking trails, connections to transport communications and other supplementary communications. However one more communication is proposed which join the site with the space for proposed static transport (parking). The communications which border the area as well as road-crossing are positional preserved and a left side exit from proposed parking lot is located at the beginning of the communication towards Hodruša-Hámre. The communication leading along the water reservoir bank from the bottom wing of Žila Tereza trail is disposed, respectively re-directed to upper wing of the Žila Tereza trail which can be alternatively utilized also for freight transport. Freight transport led through the central area vertically to the existing roads is eliminated to the position of one lane communication without a dual copy and without haulage space. Static transport is situated to the terrain cut on the right side of the road from Hodruša-Hámre to Banská Štiavnica and solved as one side parking with one exit and capacity of 19 passenger cars.

### *Solution of the central space*

The central space of the area includes two positions: the entry to the landscape itself (trailhead) and the Červená Studňa water reservoir, both being closely related. Separating of them would not result in the required effect. The entry to the landscape is arranged passing through an information point, guiding to individual hiking routes and interpreting the water reservoir as a technical site. The arrangement of the central area respects also the surrounding areas, therefore a uniform communication system of walking movement is proposed in the entire locality. It does not fulfill only its primary function, but by its location and dimensions is adapted to the mole, walk-boards, benches or an outlook-tower (see Alternative 2). The communication system is arranged in the central area tangentially to the new (original) bank of the water reservoir and leading to the landscape. In the entry position it is supported by information panels of appropriate form and content (in Alternative 2 also with a floating mole), compositionally with an outlook-tower as a symbol adequate to this position. The Červená Studňa water reservoir reconstruction is expected to be implemented in the most natural form. The essential requirement is to fill it up and to keep the standard water level at the hygienic flow. From the technical and compositional point of view it is necessary to remove coppices from the inner side of the dam and its top what will result in presentation of the water reservoir as a technical site.



### *Solution of other elements*

The proposal of the position and form of other elements logically follows the formal solution of the central area. The entry position to the landscape in the northwestern part of the proposed area consists of a bench system and connected shelters of archetypal shape connected to the central area by a terrain ridge and a walkway. The position of a picnic area is clearly differentiated from the entry and central position by its situating below the water reservoir dam. Each of the picnic boxes has a hardened entry area, simple shelter, fire place and benches. The most southern proposed entry area of walking routes from the center of Banská Štiavnica has a potential to present a water gallery and a water source. Entries to these objects are arranged by system of benches.

### Objective

The proposed arrangement of an information point should contribute to the clarification and zoning of the space. The territory potentials should be presented in the most numerous interactions within the context of the landscape what will bring the required effect of a full-valuable information point.

## **II. Documentation of steps taken within the process of planning the Červená Studňa Information Platform**

*(Silvia Herianová)*

Červená studňa is a place that is known by most of the population of Banská Štiavnica. It is a frequently visited tourist site, which also serves many other functions. The site was selected for developing a landscape design proposal with the purpose to harmonize all the functions (transport, forestry, water supply, recreation) that meet in this point. It is a model project during which experts and stakeholders join in a process of planning the area. An information platform is planned to be built there, and the site should also serve as a starting point for hikers but also for those who would like to walk down to the center of Banská Štiavnica.

### **II.1. Public tender (November 2002)**

Public tender was announced and the terms of reference for the design of the Červená studňa information platform provided. Two architects submitted their proposals. The proposals were reviewed and discussions held with both of them. This procedure made it possible for the project co-ordinators to decide which of the architects will be given the job. Ing. arch. Peter Mravec from Banská Štiavnica was selected. He worked together with his colleague, Ing. arch. Richard Murgaš.

### **II.2. Contract preparation (December 2002)**

Contract was prepared, submitted to the Mayor of the town of Banská Štiavnica and to the Architect for signature, and eventually signed.

### **II.3. Initial Work on the Design (December 2002 - January 30, 2003)**

The architects started to take initial steps necessary for creating a design proposal for the given area. They found out that geodetic measurements were necessary to complete, therefore they required an extra amount of money for this purpose. Their request was approved.

They submitted their first idea of the area design on a map on January 20<sup>th</sup>.

### **II.4. Meeting of architects (Mravec, Murgaš) with the German project co-ordinator (January 23, 2003)**

The meeting was held shortly before the workshop about Červená studňa. The architects presented their ideas on a first draft proposal and verbally. The sustainability of their proposal was discussed. The architects asked the German co-ordinator for a methodology that is commonly used by German landscape

architects. The German co-ordinator promised to get in touch with a landscape architect in Germany and ask for such methodology.

### **II.5. Workshop about the Červená Studňa information platform – preparation**

Potential participants of the workshop were identified in December 2002 and a 2-page letter was sent to inform them about the workshop preparation, project purpose, goals and ideas. Institutions, organizations, companies and individuals, the work of which is related to the locality of Červená studňa, were among the selected potential participants. By informing in advance, the potential participants were provided with a sufficient amount of time for thinking about the Červená studňa area, and this way they could prepare for the discussion. Telephone calls with the future participants were made, and they were often very pleasant and open. Through these contacts, a certain level of mutual trust started to be built, and it was also a good way to develop public relations.

Participants were required to confirm their participation.

### **II.6. Workshop about Červená studňa (January 30, 2003)**

Program:

- a) Welcome remarks by the Project Manager (Ján Roháč);
- b) Participants introducing themselves and the organization they represent;
- c) Short overall presentation of the project: Sustainable Tourism Development in Banská Štiavnica;
- d) Purpose of planning the Červená Studňa information platform: it is a model project with an aim to show new procedures in preparation of a location plan that includes work with experts and stakeholders;
- e) Presentation by the architect – using digital data projector;
- f) Discussion about the presented area design;

### **Results of the workshop:**

Number of participants: 18 (including the project co-ordinator and tourism manager).

Discussion about the area design was lively and interesting. In spite of the fact that *Mestské lesy* (Forest Management Company) and *Slovenská vodárenská spoločnosť* (Water Supply and Sewer Management Company) did not send their representatives, it was clear that there are many conflicts of interests at Červená studňa.

The clearest message of the workshop: Reconstruction of the lake is a prerequisite of revitalizing the area.

There were many comments made about the original and present state of Červená studňa area. Ecological and other limits, such as gypsies living nearby, were discussed.

Examples of projects already implemented or designed for implementation in the area of Červená studňa were presented.

The environment of the workshop promoted friendly relationships among the participants. These relationships could play an essential role when looking for synergies.

Architects challenged the participants to think thoroughly about this area, because the purpose/content of the locality has not been previously defined. “The time has come for people to decide how they want this place to look like and what they want to do here.” (Peter Mravec)

No serious concerns were raised by the workshop participants regarding the design of the area.

Minutes of the workshop was sent to all those who were invited, even if did not take part.

### **II.7. Second meeting of Peter Mravec, the architect, with the German project co-ordinator (February 20 2003)**

Mr. Mravec presented his ideas that reflected the inputs from the workshops. He explained that the measures required to re-vitalize the lake should not be too expensive. In addition, unemployed people could be involved in doing all the works.

He suggested that when the plans are ready, various institutions should be addressed (some have a lot of money) and asked for funding, but he also emphasized that there should be one institution to take over the responsibility for the project implementation.

During the discussion, it was revealed that it is necessary to develop two concrete action plans. One regarding the partners, timeframe, etc., and the second regarding fundraising. Mr. Peter Mravec agreed to prepare such action plans, therefore, the terms of reference for his work need to be changed. At the end, the German landscape planning methodology was given and explained to Mr. Mravec by ETE. The Slovak architect requested it on the first meeting with the German co-ordinator (see point 4). A German landscape architect, Mr. Garbe, provided the methodology for his Slovak colleagues.

### **II.8. Meeting of the architect with ecologists (March 3, 2003)**

It was the principal meeting of architects (Mr. Mravec, Mr. Murgaš) with nature conservationists (Mr. Polák, ŠOP Banská Bystrica, Mr. Trcka, Management of CHKO Štiavnické vrchy), representative of the Slovak Mining Museum (Mr. Lužina) and the project manager (Mr. Roháč).

The draft of the Červená studňa design was presented on two posters. The first poster introduced the current situation, wider framework, conflicts of interest and the possibilities for finding solutions. On the second poster, the proposed design of the locality was shown.

The design proposal was consulted mainly from the point of view of nature protection.

The participants came to two basic conclusions:

The zoning according to functions is acceptable, no significant objections were made.

The infrastructure proposed by authors is not acceptable, particularly the wooden boardwalks and the watching tower. Since the proposed infrastructure was perceived by the nature conservationists as artificial for this location, this idea needs to be re-evaluated. In addition, the nature conservationists did not see any clear and/or justifiable reasons for putting such infrastructure into this location.

### **II.9. Consultations with the project manager (March 2003)**

Several meetings of the project manager with the landscape design authors were held in order to clarify the approaches used by the architects and discuss the forms of outputs. Since the authors insisted on keeping the system of wooden boardwalks and the watching tower, they were required to prepare an additional poster. This one respects the zoning of the site but the above mentioned infrastructure was excluded from it. It means that three posters totally were prepared, two of them present the options of the territorial design proposal.

### **II.10. Overtaking meeting with the German project co-ordinator (April 1, 2003)**

The final proposals were presented on the meeting of the project team with authors of the design proposal. The outputs were delivered in the form of three posters, written report and one CD-ROM.

## **F. RECONSTRUCTION OF THE ZILA TEREZA TRAIL**

### **I. Outline of Principles for Building/Reconstructing (Educational) Trail**

*(Ján Roháč, Katarína Králiková)*

It is certainly not possible to develop or determine universal principles and criteria for building and reconstructing trails that are based on natural heritage conservation. The reasons why it is not possible may be as follows:

- the impacts of a trail on nature depend on the natural and social conditions that are different at each location,
- the purpose and intensity of using trails vary from place to place, etc.

Building and reconstructing trails in natural environment should, however, consider the following three basic aspects (that usually overlap):

#### ***Impact on natural environment***

The trail must not damage the natural environment (in the locality it passes through nor in neighboring/related localities); it should help to protect the natural environment.

#### ***Needs of the trail users***

The trail should make it possible for the user to have positive experiences (visual, educational, sport, etc.)

#### ***Trail Maintenance***

The maintenance of the trail must not damage the natural environment and should be effective (from the point of view of costs and the results achieved).

### **I.1. Trail Planning**

Before making any adjustments, or before building a new trail, it is necessary to determine the purpose of the trail, activities assumed to take place, mode of travelling on the trail and the intensity of impact made on the trail - all these factors have an influence on the design of the trail. In addition, the following shall be taken into consideration as well: the carrying capacity of the given area, inherent features of the area, required level of the environment protection, and ownership relations.

It is required to determine places of the locality that should be connected by the trail (considering its purpose) and those that should be avoided. Furthermore, those parts of the trail, the adjustments of which require special attention should be determined as well.

- The trail may for example connect vista points, educational localities, rest areas, tourist destinations, etc.
- The trail should follow the existing lines (outer part of woods, field boundaries, and the like) and avoid e.g. the inner parts of biotopes, steep slopes, places with potential erosion or localities with damaged topsoil, wetlands, gullies, etc.
- Under specific circumstances, the trail may pass through above places; in such case, however special attention must be paid to routing and construction of the trail (buffer zones, special technical measures, and the like).
- Special attention should be also given to trail crossings with public and other roads, to dangerous places (e.g. rocks, steep descents, etc.), crossings with permanent fences and the like.

When planning the trail, consider also the corridor along the trail, not only the trail itself.

Each trail makes an impact on the natural environment in wider surroundings. Therefore, take into account the area that surrounds the trail, not only the trail itself, and consider the possible negative impacts of the trail and its construction on the wider territory along the trail.

When building, reconstructing, using and maintaining a trail, it is required to include the item of environmental protection in the financial and time calculations.

The procedures and designs that do not cause damage, or cause less damage, are usually more expensive than those that have negative impacts on the environment. This needs to be considered when calculating finances. It is better to wait and get enough funding for environmentally sound techniques, than to start building, reconstructing, using or maintaining the way that would damage the environment.

For the completion of field works and use of the trail, it is required to take into account time limitations caused by e.g. animal breeding, nesting, flowering period, rut, snow melting, strong rains season, etc.

## **I.2. Field research of the planned trail**

It is required to have a good knowledge of the course of the future trail, and identify places or sections that may be somehow problematic. In addition, it is extremely important to identify sites with high biodiversity, or determine the location of such species that may be affected by the more intensive use of the territory.

The trail should be walked in both directions.

It is required to identify problematic sites, for example steep slopes, water streams crossings, roads crossings, soils with potential for erosion, swampy areas, biotopes, etc.

If possible, the trail should be walked also in spring time (when the snow melts) or after strong rains to identify sites with potential for erosion, swampy areas, standing water pools, etc.

Make sure you do not damage the nature and landscape during the research. Walk the trail, do not drive it.

Do not go beyond the existing trails during the research, unless necessary.

Identify natural sites of interest, and/or protected parts of nature.

Before starting out with field works, identify interesting or rare natural elements and/or protected parts of nature in the working locality (e.g. rare trees, newly planted trees, nesting places, burrows, rock openings, etc.), so that you can effectively protect them during field works.

## **I.3. Trail design**

The trail design is determined by the purpose of the trail, activities assumed to take place and mode of travelling on the trail, also by the supposed intensity of use, character of the environment and possibilities for terrain adjustments.

These aspects determine e.g. the length and width of the trail, length of its direct sections, radius of curves and the extent to which the surrounding vegetation is cut off.

If possible, the trail should make a loop with starting and ending in one point.

The impact made on the trail will be less intensive (therefore the construction will be more simple) because it will not be necessary to return using the same part of the trail. Also, such trail is easier to read for the user. Common starting and ending point motivates the user to go for a hike/walk, and makes it easier to monitor the trail.

A short linear route may lead from the main road, public transport stop site, parking lot, etc. to the common starting and ending point of the trail. The user, however, should be informed that the trail itself is a loop that will always take him/her back to the beginning.

The starting/ending point of the trail should be located on a flat and large enough area.

No steep ascents or descents should be at the beginning of the trail, or at least they should not be visible because they could discourage people from taking the trail. At the starting point, an

information panel with schematic outline of the trail, showing ascents, would be appropriate. The flat area of the starting/ending point makes it possible to place required infrastructure (benches and tables, information panels, etc.) of a sufficient capacity (people preparing for hike/walk meet here with people who just returned from the trail and need to take rest).

The direction of the trail may be indicated by marking or numbering the interpretation panels, but also by appropriate laying of the trail and its infrastructure.

Natural barriers, shape of curves and crossroads, invisibility of difficult sections, etc., are among the elements of trail and its infrastructure that lead the trail user in the right direction. If the trail is planned also for quicker means of transport (such as bicycle or cross-country skis), it is required to build it in two lines, even if only one direction will be suggested for use. This way, if the users do not respect the recommendation regarding direction to follow, the chance of collision should decrease. Generally, it is convenient to separate the trail for walkers from the one used by bikers.

Shortcuts may be built between some parts of the trail.

Shortcuts will make the trail more attractive for various groups of users (families with children, seniors, physically handicapped, etc.). It is important that the shortcuts are convenient, follow the same principles as apply to the entire trail, and they are clearly marked. Otherwise, the visitors will create their own shortcuts that may not respect the required principles.

If possible, it is appropriate to direct the trail along curves and diverse terrain.

More or less sharp curves, not too strenuous ascents and descents, etc. make the trail more interesting, create an impression of isolation and make the experience of walking the trail more intensive, thus increasing its attractiveness.

The direction of the trail, its dimensions and construction shall be adjusted to the planned mode of travel on the trail.

For each mode of travel, different technical and constructional parameters of the trail are required. Walking, biking, horseback riding or cross-country skiing each require different length of direct sections (i.e. visibility ahead), radius of curves, width of trail, free space above, ascents, natural barriers, marking, etc. For faster means of transport (bicycle, cross-country skis) it is necessary to consider the need of escape zones in curves at descents or ends of descents.

Technical and constructional parameters of a trail required for various types of travel can be found in technical literature, or they can be consulted with professionals.

The length of trail and free space above required are subject to change and depend on the environment the trail passes through, the maintenance required, etc.

For example, at crossing of the trail with public or other type of road, it is required to widen the free area along the trail to increase visibility.

For determining the free space required above the trail and its width, it is necessary to take into account the intensity of vegetation growth on the trail, or branch bending under the load of snow or frost cover.

The principle that the width of the trail shall increase with the increased speed of its users is generally valid.

In spite of the fact that hand tools should be used for trail maintenance (see below), it is required to assess whether the trail will be used by heavy maintenance machines. If this is a case, the width and the height of the free space above should be adjusted.

Trail crossings with public and other roads must be clearly visible and safe.

The trail shall be located the way that allows to minimize intersections with other roads.

If an intersection is necessary, it should not be located in a curve, on descent or at the end of descending part of the trail and/or road. The trail's drive into the crossroad should be adjusted to the

mode of travel on it – the higher speed transportation means (bicycle, cross-country skis) is used, the earlier it is necessary to adapt the trail – to clear vegetation off the area along the trail, to widen the trail, to notify the user in an appropriate way (signs, warnings) or to make the user to slow down (by using natural or artificial barriers).

Appropriate traffic signs should be placed on the road and the intersection itself should be clearly marked. The crossing angle should be vertical.

The sites on the trail where a higher concentration of visitors or activities is assumed (starting points, parking areas, rest areas, visitor centers, etc.) shall be planned on locations that are beyond environmentally sensitive areas.

#### **I.4. Work on the trail**

Use GPS for basic measuring works.

GPS, unlike other types of geodetic measurements, does not require cutting off vegetation.

Align carefully the work site and do not get beyond it.

Occupy the smallest possible area for work. Before starting, outline (maybe even mark out) the work site and the workers shall not get beyond it (route of trail, etc.).

In the course of work, conserve interesting natural elements or protected parts of nature.

Before starting field works, identify interesting or rare natural elements and/or protected parts of nature (e.g. rare trees, newly planted trees, nesting areas, burrows, rock openings, etc.) on the work site, mark them and protect by fencing, if needed, or otherwise.

Prefer hand tools to machines for the work on the trail.

For building, cleaning and maintaining the trail, it is required to prefer non-engine hand tools (axes, saws, shovels, hoes, scythes, etc.) to machines (motor saws, mower, shrub-cutting machines, etc.). Same applies to transport of people to the trail and material for its building.

The use of heavy machines shall be limited to places and time periods where/when no damage to the environment is caused (sites with stable soil, not on steep slopes, not after strong rains or in spring when snow melts, etc.). Special small-size machines (small, narrow-gauge motor carriers of various tools) adjusted to travel on uneven surfaces are appropriate (wide tires or belts, quiet, etc.).

Do not work in the evening or at night.

The light needed for work disturbs the animals that live in the given locality.

The relevant authority for nature conservation should provide a daily/seasonal time-table to indicate when it is appropriate to work in the area.

Use local materials and local workers and companies for building / reconstructing the trail.

By using local materials, workers and services, the amount of transportation is decreased. This way contribution is made to nature protection and to local economy.

One of the reasons of the requirement to use local materials is to prevent intrusion of foreign materials to the given environment.

#### **I.5. Surface of the trail**

The surface of the trail should be natural, and making drainage and safe travel possible.

The natural surface of the trail (mainly earth) should be used to maximum extent; on critical places (see below), other appropriate natural material may be added (gravel, stones, wood, etc.). The material used for trail building must be the same as the material found in the locality. If we want to

harden the surface (e.g. for the use by physically disabled), we shall apply solid but porous material (e.g. stone cover with sufficient space between stone pieces, gravel-grass surface, crushed rock such as limestone).

We shall definitely not use classical asphalt or concrete.

## **I.6. Standing water pools**

If there is a tendency for standing water remaining on the trail for various reasons, or if the trail is swampy, it is necessary to make water out-flow possible or overpass the wet place. It is not suggested to build detours.

By building detours of wet areas the trail is being enlarged or parallel routes are added. This is, however, not appropriate for various reasons, e.g. the trail may intrude to the surrounding biotopes, the top soil or vegetation may get damaged, etc. It is better to drain the water or lift the trail to required height. For this purpose, stones or beams may be used, also gravel, wooden boards, footbridges, etc. may be considered.

## **I.7. Erosion**

The trail shall not cross localities that have the tendency to erosion, nor shall be built to support or make the erosion possible. However, if this is not possible, it is necessary to drain the flowing surface water (from melted snow, rain, etc.) away from the trail so that it does not destroy the topsoil and make the trail deeper.

Unwisely built trail may on steep slopes serve as a channel for surface water. Fast water flow erodes the topsoil or damages the vegetation.

It is not appropriate to build a trail in a vertical or too acute angle with contour lines; this applies also to existing trails that we want to include in our route.

The flowing and eroding water may be drained from the trail by using various methods:

- deflecting the trail from the slope in a moderate angle (3-5°)
- if the trail crosses depressions through which rainwater is drained from the slope, the trail may descend in short sections to these depressions;
- building transverse draining ducts on the trail with appropriate spacing. Stones or wood are suitable materials for building such canals. The angle with the trail should be approx. 30°, and the canals should go beyond both edges of the trail so the water cannot by-pass them from top or get under them and continue flowing on the trail.

## **I.8. Traversing trail**

If the trail is traversing the slope, the possibilities for and the rate of its extending depend on the slope's inclination as well as on the given soil and vegetation conditions.

Generally, there are two variants for the trail-cut in the slope – trail cut in full profile (full-bench), or the trail is only partially cut and extended to full profile by using the material from cutting (cut-and-fill). Moderate deflection from the slope (3-5°) is important for the water to flow away from the trail.

Stones, logs or roughly planed timber (in various construction) are appropriate to use for building occasional supporting walls. It is important that these walls make out-flow/through-flow of water possible so that this does not get accumulated or improperly directed (mainly along the trail).

## **I.9. Steep slopes**

Vertical or acute angles of the trail with contour lines, i.e. steep descents or ascents should be avoided. If this is not possible, serpentes or stairs shall be used.

Serpentes should moderate the ascent for the price of making the trail longer. The curves must be placed on stabile points (with suitable topsoil and vegetation). If possible, less steep and flat places



should be used for curves. To moderate the angle and erosion, wooden steps (separate stairs) may be built within serpentines. The radius of curves differs depending on the mode of travel on the trail. Barriers (rocks, stones, logs, girders, wooden fences, etc.) may be used for preventing shortcuts. Also, benches and interpretation panels may be placed in curves; this could motivate the user to come as far as the curve where he/she can take a rest, learn something new or admire the view of the country.

Stairs are appropriate in short and steep sections, or if serpentines are not possible (for lack of space, easy-to-erode soil, etc.) The construction of stairs may vary – from placing simple stone steps on the ground to building more complicated stairs with railing placed on pales above the surface. They should be constructed from natural, if possible typical for the given locality, material. The disadvantage of stairs may be the cost of their construction and maintenance, visual disturbance of landscape, etc.

## **I.10. Rivers, streams, lakes**

The trail should not go along banks of water streams, lakes, wetlands, etc. so that rare riparian biotopes are not disturbed and erosion of banks avoided.

It is required to use natural corridors that are further away from the bank; also, separating the trail from the water by a vegetation stripe of appropriate width would be desired. Direct access to water is possible by using turns from the trail adjusted for this purpose and on sites arranged for taking rest, watching animals, etc.

The trail may pass through an area that is flooded when the water level is high. In such case, however, this fact should be considered and the construction of the trail adjusted to it.

The trail should cross rivers/streams, lakes or wetlands only if this cannot be avoided. The crossing must be located on an appropriate place, and a suitable way of crossing should be applied.

The number of water crossings may be reduced by appropriate routing of the trail (e.g. several loops on both sides of the stream with one bridging).

The bridge (ford) should be placed vertically across the river in its thinnest point, not in curves or places with unstable banks.

The drive into the bridge (ford) should respect the mode of travel, speed of the users and his/her ability to stop.

If it is really necessary to take the trail across swampy areas, it is desirable to place footbridges and wooden paths above the surface level, and not to build a surface trail.

If the water is shallow, it can be forded.

There is a disadvantage to fords: they cannot be used when the water level is high (when it rains or the snow melts).

Ford is acceptable where the banks are moderately sloped and stable, and there is sand or gravel on the bottom. For building a ford, flat stones placed in an appropriate distance from one another should be used – stones should make it possible to take steps easily, but also they should not be a barrier for water flow. The size of the stones should be such that the entire foot can rest on them; optimally they should be large enough for both feet. The stones should be firmly placed on the bottom of the river and come as high above the water level that safe crossing is possible, even if the amount of water slightly increases, e.g. after short rain.

## **I.11. Bridges:**

If possible, bridges should be built from natural and traditional materials, without the use of prefabricated elements.

The construction of bridges depends mainly on the width, depth and rapidity of water flow, also on the purpose and intensity of trail use, mode of travel, maintenance and financial possibilities. Bridges can be simple (planed girder placed over a stream) but also more complicated constructions (bridges with high loading capacity placed over wide rivers).

In the case it is not possible or it is too difficult to firmly anchor the bridge in the ground, smaller bridges and foot-bridges may be tied on one end to a firmly standing tree. This way they can get dragged by high water, but they should not be washed away.

Building bridges over large rivers is a task to be completed by a professional company.

### References and recommended literature:

- Flink, Ch.; Olka, K.; Searns, R.: *Trails for the Twenty-First Century. Planning, Design, and Management Manual for Multi-Use Trails*. Island Press, Washington D.C., USA, 2001
- Labaree, J.: *How Greenways Work: A Handbook on Ecology*. QLF/Atlantic Center for the Environment), Ipswich, MA, USA, 1992
- Rathke, D.; Baughman, M.: *Recreational Trail Design and Construction*. University of Minnesota, 2002

## II. Short overview of the reconstruction of a Section on the Žila Tereza Educational Trail

(Ján Roháč)

The goals of the practical reconstruction of a section on the Žila Tereza trail were as follows:

- to verify the feasibility of selected principles for building and reconstruction of trails in practice;
- to try out methods of trail reconstruction that are usable in Štiavnické Vrchy;
- to increase the knowledge of construction companies and management authorities about trail building;

For practical reconstruction, we have selected the section between the 3<sup>rd</sup> and 4<sup>th</sup> station of the Žila Tereza Educational Trail. The main reasons were as follows:

- to attract tourists to places that are good vista points (this was also required by the Town Hall in Banská Štiavnica);
- the trail section was in bad technical condition, and therefore suitable for reconstruction;
- the trail section crosses a very steep slope, and therefore it is suitable for implementation of model procedures;
- the trail will be part of the future Geological Educational Trail, i.e. various projects get co-ordinated in the given locality;

The choice to work on the given section was consulted with the Office of CHKO Štiavnické vrchy, Town Hall in Banská Štiavnica as well as with the manager of the Geopark project. A vista point is planned on the given section as part of the Geopark project.

The trail was in a bad technical condition before the reconstruction. Some parts were covered by soil that is sliding down, thus changing the trail to a narrow path that was not suitable for safe walk. On some places, the supporting structures have fallen apart, and as a result the trail has slid down on the slope approximately one meter. Large stones of the bedrock as well as tree roots stood in the way of tourists on many places, and so did branches of trees growing near the trail.

To complete the reconstruction works, we have decided to contract the company *Ochranár* from Banská Štiavnica. This company offered both professional capacity (specializing in forestry and construction) and education opportunities for students from the Forestry Middle School who were involved in works on the trail.

The following works have been carried out on the trail:

- removing carefully the surface vegetation;
- widening the trail so that it is comfortable to walk;
- taking away the stones that hindered safe walking;
- removing professionally the roots in the way, including treatment of their residues;
- evening out the surface and covering it with andesite grit;
- stabilizing the filling of the trail by supporting construction, and covering the construction by sods;
- removing the undesirable vegetation along the trail;
- preparing and placing drainage elements;
- making and placing benches.

The relevant authorities were informed about the planned works. In addition, the plans were consulted with the Office of CHKO Štiavnické vrchy.

The trail was reconstructed in two phases: In the first phase, all works (except for evening out the surface by andesite grit) were completed. The surface was evened 6 weeks after the first phase. This time was used to identify places with insufficient water drainage or places that tend to erode. In addition, during the 6-week period without andesite grit the soil surface of the trail was stabilized and compacted both naturally (rain followed by compaction) and mechanically (by tourists walking the trail).

During reconstruction works (described above), e.g. the following principles were applied:

- impact of works on the wider corridor along the trail was considered;
- despite slower, methods that are environment-friendly have been implemented from the very beginning;
- site was reviewed in detail before starting the work, with a especial focus on protected parts of nature that were identified and marked;
- stepping beyond the trail was limited to minimum during the works on the trail;
- hand tools were preferred for completing the works, machines (just hand machines such as motor saw) were used only if there was no other option;
- cars used to transfer the material did not leave the road and the material was carried to the locality in hands;
- no works were carried out in the evening and night;
- material from the given locality (wood) or region (andesite grit) was used;
- local company was contracted to complete the work;
- the surface of the trail (andesite grit and soil) is natural and makes infiltration and safe travel possible;
- trail is deflected from the slope and drainage is placed where necessary.

The issue of stabilization of the notches in the slope has been temporarily left unresolved. Since the trail is perceived as a study location that will be under long-term scrutiny, it was decided that the notches would not be stabilized, only on some sections by placing sods. If proven later that the notches are sliding down, thus filling in the trail with soil and stones, mechanical stabilisation will be completed.

## **G. IMAGE BROCHURE PREPARATION**

The content and form of the image brochure is quite untypical in Slovakia. The publication was designed as a rich mixture of information of various character with a goal to create a more complex picture of the town and region of Banská Štiavnica and its natural and cultural heritage. In comparison with traditional tourist guidebooks, the “dry” descriptions of history and monuments were limited to minimum; the authors focused more on things that have the potential to capture the interest of people and attract them to the town and region. In addition, the content of the book is interesting for the citizens of Banská Štiavnica as well, because facts and stories that are not that well known by the general public are presented in it.

The content of the Image Brochure is as follows:

- brief overview of the history of the town,
- description of 7 landmarks
- introducing 7 attractions,
- introducing 7 famous former inhabitants of the town,
- 7 interesting historical legends,
- description of 7 Štiavnica wonders,
- 7 recipes of traditional meals,
- description of 7 interesting routes,
- map.

Except for the layout, all the work on the publication was completed by people living in Banská Štiavnica. The members of the team of authors were Nora Bujnová, Mikuláš Čelko, Lubomír Lužina, Irena Roháčová, Ján Roháč senior and Katarína Vošková; the author of illustrations is Katarína Vošková; the authors of photographs are Lubomír Lužina, Ivan Ladziansky and Marián Lichner; technical co-operation was provided by Andrej Gašpar a Marek Lichard; editor of the publication is Ján Roháč st.

The brochure has been translated to three languages (English, German, Hungarian). It has been submitted in two formats on CD. One format is appropriate for further processing and printing; the other one is Acrobat Reader and can be used for distributing the text via internet.

## **H. REPORT OF TOURISM ROUND TABLES**

*(Ján Roháč, Silvia Herianová)*

### **I. Introduction**

The goals of the round tables on tourism were similar to those in the previous phase of the project:

- to exchange information among stakeholders and decision-making institutions in the town and its vicinity;
- to co-ordinate tourism-related activities in the town and its vicinity;
- to form and elaborate on new ideas for tourism development in the town and its vicinity;
- to present the project and its progress to the participants.

The following three round tables were organized within the 3<sup>rd</sup> phase of the project:

1. October 18, 2002 – meeting of managers of tourism related projects and institutions;
2. November 26, 2002 – meeting of project managers, businessmen, citizens interested in tourism and institutions;
3. January 29, 2003 – meeting of the Town Council members.

The round tables participants were invited personally, via mail and local press.

## II. Structure of participants

Representatives of	October 18 2002	November 26 2002	January 29 2003
Public institutions, museums, town council members, etc.	9	13	9
Private businesses	2	10	4
Non-profit organizations, students and others	1	8	1
TOTAL	12	31	14

## III. Content of Round Tables

### October 18, 2002

The Mayor of the town, Mr. Marián Lichner, opened the meeting.

Dr. Zerola (Slovak Agency for the Environment /SAŽP/, Banská Štiavnica) presented the current state of the Geopark Banská Štiavnica project. The discussion that followed tackled the issues of the Geopark use, its further development and maintenance, its connection to other tourism projects in the town, legal status of the Geopark preparation and the property ownership rights.

Dr. Roháč (Amber Trails Association) presented the current state of the project *Promoting Sustainable Tourism in Banská Štiavnica*. The discussion focused on the ways the project is connected with some other development activities in the town.

Ing. Múdry presented the activities of his company Ekotrust, mainly their project that is focused on tourism development in the region and building trails for cross-country skiing. In the next step, the relation between the trails building activity and the property ownership/administration rights of the Forest Management Company was discussed.

Mr. Lichner presented the current situation in the zoning plan preparation. In addition, he provided some comments regarding both the co-ordination of tourist activities in Banská Štiavnica and the quality of services provided in the facilities in the town.

In the final discussion, the following issues were tackled:

- participation of the Slovak Mining Museum in tourist activities in the town;
  - use of forests for recreation and not for exploitation;
  - - new location for the tourist information center.

### November 26, 2002

Ing. Lichner and Dr. Roháč opened the round table meeting. The Mayor of the town declared that the Town Hall is interested in co-ordinating the tourist activities because this could improve the quality of services and offers provided.

The director of the Municipal Tourist Information Center (MTIC), Ms. Benediktyová, provided an evaluation of the last summer season. The following topics were summarized in her presentation:

- the number and structure of the MTIC visitors,
- the demand for visiting particular attractions,
- the problems most often defined by tourists

Dr. Labuda, the Director of the Slovak Mining Museum (SMM), evaluated the last summer season from their point of view, and in his presentation he focused on topics such as:

- number and structure of the SMM visitors,
- plans for future

- participation of the Slovak Mining Museum in tourist activities in the town,
- handling deficiencies.

Ing. Maruška (Office of the Protected Landscape Area /CHKO/ of Štiavnické vrchy) presented the current and planned activities of CHKO in the sphere of tourism (reconstruction of both the trails in CHKO and watching tower on Sitno, and promotion).

The discussion that followed was mainly focused on topics such as co-ordination of activities, capacity for projects preparation, handling deficiencies, functions of municipal forests, promotion of town, and zoning plan preparation.

Dr. Zerola (SAŽP) presented the current state of the Geopark Banská Štiavnica project.

Dr. Roháč informed the participants about the current state of the project *Promoting Sustainable Tourism in Banská Štiavnica*.

Ing. Kaňa, director of Slovenská banská, a.s., informed about the company's plans related to tourism development in the village of Hodruša-Hámre.

Dr. Roháč informed about the preparation of a joint exposition of Amber Trail Association and Hotel Grand Matej at the SlovakiaTour 2003 exhibition.

### **January 29, 2003**

Ján Roháč informed the participants about the current state of the project *Promoting Sustainable Tourism in Banská Štiavnica*.

In the discussion that followed the participants focused on the following topics:

- relation of the local administration to tourism development,
- extension of business hours,
- certification of tourist service facilities,
- preparation of study trips,
- replacement of the municipal information center,
- further development of the Červená studňa locality,
- building trails for cross-country skiing.

## **IV. The most significant ideas from Round Tables**

- Co-ordination of tourism-related activities is still missing in the town. However, when compared with the previous years, more people who are active in the sphere of tourism in the town and its vicinity are aware of this deficiency. Consequently, the interest in this issue and the dissatisfaction with the existing status-quo are increasing.
- So far, the Town Hall has not created any structure (e.g. a department of the town hall, and the like) that would be responsible for dealing with tourism-related issues in the town.
- Considering that we are getting close to the day of entering the EU, there is an increased interest of towns/villages and private businesses in the EU support funds as well as in a more systematic development of tourism in the region.
- Three main tendencies of tourism development may be recognized among the people involved with tourism-related activities in the town: tourism focused on (i.) learning (with an emphasis on mining), (ii.) active relaxation in nature (hiking and biking), and (iii.) skiing (both down-hill and cross-country).
- An increased dissatisfaction with the management of municipal forests may be noticed in the last couple of months. The main reason is that they significantly hinder the process of trails building in the region. Personal changes are planned to take place in the company's management, therefore, this situation is expected to change.

## **V. Main results of the round tables**

- The knowledge of what is required for tourism development has significantly increased among the Town Council members. Their growing interest in implementing more systematic changes is clearly visible. Instead of dwelling on traditional approaches (dealing with partial and often not significant problems of tourism), their effort is more oriented on creating a strategy of region and tourism development, finding conceptual solutions for keeping the town clean, establishing necessary developmental structures, etc.
- The attitude of the Slovak Mining Museum towards tourism has improved. In spite of some deficiencies that still exist, this tendency is continual and the interest of the museum management in improving their services is clearly visible.
- The interest of private businesses in mutual communication has increased. This is also reflected in their more frequent participation in round tables, but also in intensive discussions that are held in between the round table meetings.
- The potential for co-operation among private businesses, tourism project managers, institutions and citizens has increased significantly. This is a clear result of the ongoing intensive information exchange.

## **VI. Recommendations for Next Round Tables**

- It is necessary to keep paying an increased attention to private businesses involvement.
- It is better to organize the round tables in an informal environment (not in the Town Hall) because the discussion is more relaxed and fruitful. Various restaurants or cafes may take turns in providing space for such meetings. In addition, the owners of the facilities may have at least a symbolic financial benefit from these events.
- In addition to inviting people who are active in the sphere of tourism in the town and its vicinity, town council members should be invited by personal letters. The most significant outcomes of each round table meeting shall be included in the program of the town council meetings for discussion.
- In the next phases, it will be beneficial to prepare round tables having a concrete purpose and goal to pursue. In the course of the round table meetings, a small survey may be always carried in order to find out topics of interest for the next one.

## **I. REPORT ON THE SET OF SEMINARS**

*Detailed reports and outcomes of all seminars are stored in the archive of the Amber Trail Association.  
(Irena Roháčová)*

### **I. Goals and Structure of Seminars**

Goals of the set of seminars were as follows:

- to increase public awareness of tourism and its benefits, and thus increase the public interest in tourism;
- to increase communication among tourism stakeholders and other citizens;
- to motivate people to either start activities in the sphere of tourism, or contribute to the further development of the existing activities;

We prepared ten seminars in two sets of five:

- a) for newcomers,
- b) for advanced (those who attended the set of seminars in spring 2002).

The seminars were scheduled the way that people, if interested, could attend all ten of them, regardless of the membership in the above groups.

The topics for the newcomers were basically equivalent with those in spring 2002:

- a.1. Introduction to tourism; impact of tourism on the environment;
- a.2. Tourism offers in Banská Štiavnica and its vicinity;
- a.3. Introduction to sustainable tourism;
- a.4. Introduction to marketing;
- a.5. Banská Štiavnica in the eyes of tourists.

The topics for the advanced participants were new:

- b.1. Vision – its purpose and development; vision of tourism development in Banská Štiavnica;
- b.2. Zoning plan and its role in tourism development; zoning plan of Banská Štiavnica;
- b.3. Certification in tourism;
- b.4. Preparation of promotion materials;
- b.5. Tourism associations – purpose, functions and forms.

The structure of the seminars has not changed:

9.00-12.00 Lectures and discussion  
12.00-12.45 Lunch  
12.45-14.30 Discussion and practical exercises

The seminars took place in Hotel Grand-Matej. The following equipment was used:

- flipchart, overhead projector (provided by Hotel Grand-Matej),
- notebook (provided by the Amber Trail Association),
- data-projector (rented from Klaudstudio company).

People were invited to participate the following ways:

- an invitation letter was sent to selected people – one per a set of seminars (dates of all seminars within the 5-month lasting educational program were provided);
- a presentation article about the seminars was published in the local newspaper *Štiavnické noviny*, including a general invitation to all seminars (dates of all seminars were provided as well);
- an individual invitation was published before each seminar in *Štiavnické noviny*;

personal recommendations.



In comparison with the previous set of seminars, the structure of participants has changed – the number of small business representatives was significantly higher. Unfortunately, systematic attention of the town representatives has not been attracted again.

At the end of each seminar, the participants had a chance to express anonymously their opinion (likes, needs improvement) of the given seminar.

In addition to their educational function, the seminars were also forums for discussion where opinions could be expressed and actual problems solved in an informal environment. To some extent, the seminars were conveniently supplementing the round tables on tourism.

## II. Seminars

### II.1. Seminar a.1.: Introduction to tourism; impact of tourism on the environment

Date: November 12, 2002.

Lecturers	Topic
Ing. Csilla Dropová, free-lance consultant, Banská Bystrica	Introduction to tourism
Dr. Ján Roháč, Amber Trail Association, Banská Štiavnica	Impact of tourism on the environment

Participants:	
People representing sectors:	
public institutions, museums, local government, etc.	1
private businesses	5
Citizens, non-profit organisations, students, etc.	10
<b>TOTAL</b>	<b>16</b>

#### *Topic 1: Introduction to tourism*

Content of the presentation:

- what is tourism and its potential for development in Slovakia;
- how tourism differs from other sectors of economy;
- tourism offer – primary and secondary.

Questions and discussion topics:

- how to sell specific tourism products;
- how to change people working in tourism;
- how are the various tourist service providers linked.

#### *Topic 2: Impact of tourism on the environment*

Content of the presentation:

- clustering impacts;
- negative impacts on the environment;
- negative impacts on the cultural heritage;
- positive impacts on the nature and cultural heritage;
- possibilities of preventing negative impacts and making use of the positive ones.

Questions and discussion topics:

- purpose of monitoring visitors;
- role of professional state authorities (responsible for nature and historical heritage protection);
- current situation in the region of Banská Štiavnica.

## II.2 Seminar a.2.: Potential of Banská Štiavnica and its vicinity for tourism development

Date: December 5, 2002

Lecturers	Topic
Ing. Viliam Pichler, Institute of Scientific Tourism, TU, Zvolen	Potential of the natural heritage of BŠ
Ing. Lubomír Kmeco, College of Economy, UMB, Banská Bystrica	Potential of the cultural heritage of BŠ

Participants:	
People representing sectors:	
Public institutions, museums, local government, etc.	4
Private businesses	8
Citizens, non-profit organisations, students, etc.	3
<b>TOTAL</b>	<b>15</b>

### *Topic 1: Potential of the natural heritage of Banská Štiavnica for tourism development*

Content of the presentation:

- general potential of nature for tourism development;
- basics of tourism in nature; chances of negative impact of tourism on nature;
- opportunities for tourism in nature in the region of Banská Štiavnica;
- biking and skiing in Štiavnické vrchy hills;
- respect for the nature protection is required when planning tourist activities in Štiavnické vrchy hills.

A lot of examples from Slovakia and the surroundings of Banská Štiavnica were provided and explained during the individual presentations.

Questions and discussion topics:

- approaches that could be used to harmonise tourism and nature protection, including some examples from Slovakia;
- state framework for sustainable tourism;
- ways to limit tourism in nature;
- education of tourists towards increasing their sensitivity to heritage protection.

### *Topic 2: Potential of the cultural heritage of Banská Štiavnica for tourism development.*

Content of the presentation:

- description of Banská Štiavnica as a tourist destination from the point of view of its cultural heritage;
- structure of visitors of Banská Štiavnica;
- comparing the tourism offers in Banská Štiavnica with other towns in Slovakia.

Questions and discussion topics:

- lack of tourism offers provided in Banská Štiavnica, and insufficient promotion of the town as a cultural heritage site;
- abandonment of cultural tourism by state and town.

## II.3 Seminar a.3.: Introduction to Sustainable Tourism

Date: January 14, 2003

Lecturer	Topic
ing. Dana Švihlová, College of Economy, UMB, Banská Bystrica	Introduction to sustainable tourism

<b>Participants:</b>	
People representing sectors:	
Public institutions, museums, local government, etc.	6
Private businesses	6
Citizens, non-profit organisations, students, etc.	9
<b>TOTAL</b>	<b>21</b>

Content of the presentation:

- development of the term „sustainable tourism“, relevant documents, definitions;
- conditions for sustainable tourism in Banská Štiavnica;
- importance of participation of individual stakeholders in the entire process of tourism development;
- attitude of local people to tourism, its role and impact on local community;

Questions and discussion topics:

- environment-friendly transport in general and in Banská Štiavnica;
- quality of co-operation among businessmen in the town;
- role of the information center in providing service for visitors and citizens of the town;
- modes of financing tourism development.

## **II.4 Seminar a.4.: Introduction to Marketing in Tourism**

Date: February 11, 2003

<b>Lecturer</b>	<b>Topics</b>
ing. Csilla Droppová, free-lance consultant, Banská Bystrica	Introduction to general marketing Marketing strategy Model products development

<b>Participants:</b>	
People representing sectors:	
Public institutions, museums, local government, etc.	2
Private businesses	7
Citizens, non-profit organisations, students, etc.	5
<b>TOTAL</b>	<b>14</b>

Content of the presentation:

- explanation of what is marketing;
- individual elements and factors of marketing;
- specifics of marketing in tourism;
- basic analysis of the offers and marketing in Banská Štiavnica;
- elements of the marketing strategy;
- tourism products development;

Questions and discussion topics:

- examples from Banská Štiavnica connected to particular parts of the presentation;
- relation of both the general economical situation and the purchase power of the visitors to the tourism offers in Banská Štiavnica;
- the issue of increasing the number of visitors in a destination;
- regional distribution of tasks in tourism marketing.

## II.5 Seminar a.5.: Banská Štiavnica in the eyes of tourists

Date: March 11, 2003

Lecturer	Topics
Ján Roháč senior, Tourist Guiding Service R*	Tour of the town Summarisation of deficiencies in the town

Participants:	
People representing sectors:	
Public institutions, museums, local government, etc.	2
Private businesses	8
Citizens, non-profit organisations, students, etc.	1
<b>TOTAL</b>	<b>11</b>

The tour of the town focused on the following specific issues:

- ways and requirements of tour-guiding;
- description of typical customers of tour-guiding service;
- development of offers and routes for tour-guiding service;
- visible deficiencies and problems in the town as seen by visitors.

Questions and discussion topics:

- appropriateness and inappropriateness of presenting some of the landmarks and other objects to visitors;
- requirement to extend the tour-guiding service beyond the town;
- summarisation of deficiencies and problems, discussing who is responsible for them and how could they be eliminated.

The seminar was highly appreciated not only because of the extensive scope of knowledge of the lecturer, but also because the participants had a chance (many of them for the first time) to perceive Banská Štiavnica as a visitor, not as an inhabitant or businessman. This viewpoint was considered to be absolutely different and very useful.

## II.6 Seminar b.1.: Vision – its purpose and development

Date: November 19, 2002

Lecturer	Topics
Dr. Juraj Mesík, Ekopolis Foundation, Banská Bystrica	Vision – its purpose and development Vision of tourism development in Banská Štiavnica

Participants:	
People representing sectors:	
Public institutions, museums, local government, etc.	5
Private businesses	6
Citizens, non-profit organisations, students, etc.	10
<b>TOTAL</b>	<b>21</b>

Content of the presentation:

- current situation in the town of Banská Štiavnica and its reasons;
- what is vision and what is its purpose;
- analysis of the town development with and without a vision;
- who is to be the vision holder.

Practical exercise:

- developing a vision of the future development of Banská Štiavnica using the method of controlled imagination;
- discussion about the implemented method and its result.

## II.7 Seminar b.2.: Zoning plan and its role in tourism development

Date: December 17, 2002

Lecturers	Topic
ing. arch. Iveta Kavčáková, SAŽP CÚR Banská Bystrica	Zoning plan and its link with tourism
ing. arch. Gabriel Szalay, AGS Atelier, Prievidza	Zoning plan of Banská Štiavnica in preparation

Participants:	
People representing sectors:	
Public institutions, museums, local government, etc.	6
Private businesses	8
Citizens, non-profit organisations, students, etc.	2
<b>TOTAL</b>	<b>16</b>

### *Topic 1: Zoning plan and its link with tourism*

Content of the presentation:

- what is zoning plan, legislation related to it, its purpose and forms;
- description of individual parts of a zoning plan;
- description of particular steps to be taken within the zoning plan development;
- public participation in the zoning plan development;
- role of the zoning plan in tourism development.

Questions and discussion topics:

- problems with public participation in the zoning plan development;
- phases of the zoning plan preparation.

### *Topic 2: Zoning plan of Banská Štiavnica in preparation*

Content of the presentation:

- current state of the Banská Štiavnica zoning plan preparation;
- next steps of the Banská Štiavnica zoning plan preparation;
- brief overview of the content of the zoning plan assignment and identification of some problematic issues.

Questions and discussion topics:

- specific problems of Banská Štiavnica and possibilities of their solution through the zoning plan (thermal drill, spa in the town, developmental limits, use of older development plans)
- problem of not sufficient involvement of the citizens in the zoning plan assignment preparation.

## II.8 Seminar b.3.: Certification in tourism

Date: January 28, 2003

Lecturer	Topic
ing. Csilla Droppová, free-lance consultant, Banská Bystrica	Tourism-related certification, its purpose and methods
Ján Roháč, Amber Trail Association, Banská Štiavnica	Draft principles of local certification in the region of Banská Štiavnica

Participants:	
People representing sectors:	
Public institutions, museums, local government, etc.	5
Private businesses	9
Citizens, non-profit organisations, students, etc.	3
<b>TOTAL</b>	<b>17</b>

### *Topic 1: Tourism-related certification, its purpose and methods*

Content of the presentation:

- what is certification, certification patterns and their purpose;
- basic classification of certification patterns;
- difference between certification and categorisation;
- certification as an essential tool of marketing and quality improvement;
- situation in the world and Slovakia, some examples of implemented certifications and their evaluation.

Questions and discussion topics:

- feasibility of implementing the criteria;
- inadequate legislation and lack of funding required to cover the costs of a certificate acquisition;
- stepwise implementation of certification;
- examples of meeting or not meeting some of the criteria.

### *Topic 2: Draft principles of local certification in the region of Banská Štiavnica*

Content of the presentation:

- presentation of the current state of the certification proposal that is being prepared within the project;
- description of the individual "pillars" (protection of the environment, customer care, support of the region).

Questions and discussion topics:

- partial comments regarding particular criteria;
- possible modes of evaluation and awarding certificates in Banská Štiavnica;
- regional vs. local nature of the certification system.

## II.9 Seminar b.4.: Preparation of promotion materials

Date: February 25, 2003

Lecturer	Topic
ing. Ján Fakľa, G.A.G. Agency, Banská Bystrica	Basics of promotion materials preparation

Participants:	
People representing sectors:	
Public institutions, museums, local government, etc.	4
Private businesses	11

Citizens, non-profit organisations, students, etc.	2
<b>TOTAL</b>	<b>17</b>

Content of the presentation:

- basics of the marketing communication, its goals, target groups and communication channels;
- purpose and goal of trademark and logo;
- role of competition;
- basics of design (with practical examples), examples of catchwords and trademarks and their creation, basics of layout and forms of paper type of promotion materials;
- preparation of advertisements, costs and production chain;
- evaluation of promotion materials the participants have brought along.

Questions and discussion topics:

- comparing costs and benefits of advertising;
- effect of various forms of advertising;
- measuring the effectiveness of advertising;
- concept of advertising Slovakia;
- ideas on how to improve the promotion materials brought by the participants.

## II.10 Seminar b.5.: Tourism associations

Date: March 25, 2003

Lecturer	Topics
Ing. Pavol Weiss, Institute of Tourism, Bratislava	Goals and tasks of tourism associations Forms of tourism associations Association in Banská Štiavnica

Participants:	
People representing sectors:	
Public institutions, museums, local government, etc.	5
Private businesses	9
Citizens, non-profit organisations, students, etc.	3
<b>TOTAL</b>	<b>17</b>

Content of the presentation:

- goals and tasks of a tourism association in a destination;
- prerequisites of establishing an association;
- reasons of possible functioning problems;
- forms and structure of a tourism association;
- financing a tourism association;
- possibilities and chances of establishing a tourism association in Banská Štiavnica.

Questions and discussion topics:

- analysis of possibilities to establish an association in Banská Štiavnica;
- competition among associations;
- role of the state and local administration.

### **III. Summary of participants' requirements, recommendations and comments**

#### **Regarding the content and form of seminars:**

- at most of the seminars, the participants appreciated their practical character and the fact that practical examples were discussed;
- the lecturers have understood that, despite the unfavorable situation in the sphere of tourism in Banská Štiavnica that naturally creates attitudes of criticism, it is necessary to talk about possibilities for solutions, improvements and development;
- sometimes it is appropriate to notify the lecturers that they speak about one thing too long, going into unnecessary details;
- it is better if there are two lecturers, instead of one for the whole day;
- if there is another round of seminars, it would be appropriate to include more out-door activities in the town or its vicinity;
- in the case the seminars will continue, small fees could be required from participants;
- the participants may be asked to prepare their inputs on the given topic that could be then discussed;
- it would be beneficial if some of the lecturers prepared their presentation more tailor-made for Banská Štiavnica;
- it is beneficial to avoid using too many technical terms, and if then need to be explained;
- the participation on seminars would increase, if they were more intensively advertised;
- it is necessary to watch the time given to lectures – more time should be given to discussions and practical exercises;
- it is important to attract the town representatives, otherwise the seminars lose significantly their purpose (if there was a town representative on the seminar, she could provide explanations immediately, and/or collect incentives from participants);
- it would be beneficial to publish the outcomes of seminars, present them to wider public and the town management;
- it should be avoided to carry out building maintenance in the time of seminars because these works are noisy and disturb the participants;
- a different setting of chairs should be considered – facing the presenters (it is not comfortable to be turned one direction for a whole day);

#### **Tourism development in Banská Štiavnica:**

- In the course of discussions, the following issues have been perceived as problems that need to be solved as soon as possible:
  - dirt on streets (litter, gravel on roads from winter), green areas, around garbage cans, etc.
  - extra garbage cans need to be installed in the town, and they should be emptied more frequently;
  - signs on buildings and orientation system are missing;
  - more benches for sitting would be appreciated;
  - to complete the road pavements, and to repair the destroyed ones;
  - to put up a clearly visible sign for public restrooms;
  - to make sure that posters are not placed anywhere and the old ones are always removed;
  - to motivate the owners of buildings to maintain their property, i.e. to convince them to take care of the facade, gutters, front garden, etc. (in other words to keep in good condition everything that is visible from the street);
  - to control and require removal of piles of construction material and garbage;
  - to make (through fees, education) people clean up after their dogs;
  - to build a feedback system between the town management and the visitors;
  - to renew, or at least clean up the Botanical garden;
  - to ensure maintenance of roads and sidewalks in winter – not only by throwing gravel or salt, but mainly by shovelling away the snow;



- The lack of interest in tourism development among the town representatives have been perceived by the participants as a significant problem. The town has made a lot of verbal statements supportive of tourism, but no truly useful activities.
- Most of the measures required for tourism development do not need large investments; only the work of the town hall, municipal police and technical maintenance service would need to improve.
- If the inhabitants of the town are not able to solve the town's stagnation, they at least should not hinder the enthusiasm of newcomers who make effort to achieve progress.
- In addition to solving significant problems, it is also necessary to deal with details such as appropriate handles on historical objects, stylish (or at least not working) outfit of service personnel, etc.
- The calendar of cultural, social and sport events is missing. It would be beneficial to have it at the beginning of the year, even if without great details.
- Tourism development in the town should not dwell only on cultural heritage; a more extensive offer should be created
- The Town Council should establish a commission with a sole focus on tourism.
- The idea of establishing a regional tourism association has been strongly supported by the participants who also expressed their interest in becoming members of such association.

## **J. Reports from study trips**

(Silvia Herianová)

### **1. Report from study trip to Hungary**

(Ján Roháč)

Study trip to Hungary was organized on February 8, 2003. The participants were as follows:

Silvia Herianova – tourism manager, Banská Štiavnica

Karol Herian – teacher, Ecomuseology Chair, Matej Bell University, Banská Štiavnica

Jan Rohac – project manager, Amber Trail Association, Banská Štiavnica

Irena Rohacova – Tour Guide Agency R\*, Banská Štiavnica

The goal of the study trip was to get acquainted with a successful tourist destination in Hungary that is close to Slovakia, to study their way of management and look for possibilities in sharing common market segments. An additional objective of the study trip was to gain experience that would help to prepare a larger study trip for tourism stakeholders from Banská Štiavnica.

Two destinations were visited:

#### **Kacár Homestead**

The Kacár Homestead can be found in Szokolya, on the foot of the Börzsöny Range. It is located on the edge of the village by the Duna-Ipoly National Park, on an elevated plateau which offers a wonderful view of the surrounding district.

The farm would like to introduce their guests to the pleasures of a country lifestyle, and to show them the local places of interest. The owner believes that there are many people who are interested in the traditional village ways of life and in their folk legacies. Visitors can watch and even try many traditional works and crafts (e.g. preparing bread, horse-drawn ploughing, manual sowing, harrowing, weeding, manual harvesting, bundling into sheaves, sieving, leavening, kneading, baking in an oven, etc.). In addition, the Kacár Homestead has space for campers and can provide accommodation in small huts.

The farm is managed by a family, one man and his wife. During the last year, they had about 3000 visitors, mainly schoolchildren, who were coming in school groups.

The family type of management is very unique. The wife organizes the groups and runs part of the activities, and the husband manages the farm, and the majority of activities. During the years, they have developed their own marketing and system of promotion.

Participants of the study trip had a meeting with the husband, and spent time discussing some of the management issues.

### **Szentendre**

Szentendre is a small historical town located about 15 kilometres west of Budapest. It is a town of narrow streets and small buildings, shops and small galleries. The income of the town comes mainly from tourism; it is a very popular and attractive site which benefits from the closeness of the capital Budapest. Visitors are mainly foreigners, only smaller part of them are Hungarians.

The study trip participants took a walk through the town, and got engaged in multiple discussions with the shop owners.

### **Conclusions**

Despite the fact that both of the visited sites are highly attractive, the group came to the conclusion that they are not suitable to be used for the purpose of a study trip within this project. Kacar Homestead is a very good example of rural tourism, however tourism in Banská Štiavnica is not rural. It is very difficult to find examples that could apply for Banská Štiavnica, except for generally usable methods and know-how.

Nor Szentendre is a good place to visit and study. Here, the conditions differ essentially from those in Banská Štiavnica: it is located close to Budapest, a huge tourist destination, it is not a UNESCO World Heritage site (therefore the level of monument protection is lower), it is not a very good example of sustainable tourism because it is too commercial. The character of shops does not follow the local traditions; it is even filled with globally sold products.

The final decision of the team was to select another site that would be more appropriate for studying. This site should be selected based upon common features that make the place more similar to Banská Štiavnica as Kacar Homestead and the town of Szentendre are.

At the end of the selection process, the town of Kroměříž came out as the most appropriate place to visit by local stakeholders from Banská Štiavnica (read below).

## **2. Report from study trip to Kromeriz, Czech republic (March 7 – 8, 2003)**

(Silvia Herianová)

Goal: To visit a town that has common features with the town of Banská Štiavnica, and try to learn about (1) the problems they encounter when dealing with tourism issues, and (2) the steps they decided to take when solving these problems.

Purpose: To show to the elected representatives of the town of Banská Štiavnica, but also to other citizens of the town, an example of a town that tries to approach the issue of tourism in such a way, that this has a positive impact on the economy of the town and its life in general.

The program of the excursion in Kroměříž was prepared by the Town representatives, in co-operation with the former vice-mayor of Kroměříž – Dr. Eva Nováková who also spent most of the time with the group from Slovakia throughout the two days of the study trip. During her work as a vice-mayor, Dr. Nováková was responsible for dealing with the issues of tourism development in the town of Kroměříž (previous 4

years), and she was very kind to provide the group from Banská Štiavnica with any information that was required.

Program and a brief description of its content:

March 7, 2003

11.00 – Meeting the Mayor of Kroměříž, Mr. Peter Dvořáček, and other representatives of the town in the Town Hall of Kroměříž;

Mr. Petr Dvořáček welcomed the group from Banská Štiavnica and gave a presentation on the history of the town and its region. He also explained shortly how the Town Council of Kroměříž work, and what are the tasks of the Department of Culture, Tourism and Monument Care of the Town Hall. .

12.00 – Lunch and a work meeting at the Hotel High School.

Participants of the meeting:

Ing. Petr Hajný, Director of the Hotel High School;

Ing. Karel Pokorný, Director of the Business High School, Postgraduate Professional School (focused on tourism) and Technical High School;

Mgr. Dagmar Slavičinska, Deputy Director of the above mentioned three schools;

Mgr. Petr Pálka, Director of the Department of Culture, Tourism and Monument Care at the Town Hall;

Mgr. Eduart Barot, assistant at the above Department;

Dr. Eva Nováková, former vice-mayor of Kroměříž.

All the above schools have tourism incorporated in their educational plans. These schools focus on preparing people to work in various sections of tourism industry (mainly in hotel receptions, restaurants, travel agencies, etc.). The discussion with the school representatives was very inspirational. The questions were mainly focused on the following topics: the content of the educational plans, involvement of students with tourism activities in the town, and the employment chances of the graduates.

In the second part of the discussion, Mr. Pálka informed the group from Banská Štiavnica about the work of the Department of Culture, Tourism and Monument Care. After this introduction, the questions of the study trip participants focused on some general issues of tourism development in the town, financing promotion materials, certification of tourist facilities, etc. Mr. Pálka, Mr. Barot and Ms. Nováková were putting a lot of effort to answering all the questions.

16.30 – Guided tour of the town.

18.30 – Dinner and work meeting in the Archbishop Vine Cellars.

Participants from Kroměříž:

Ing. Petr Dvořáček, Mayor of the Town of Kroměříž;

Mgr. Jitka Dvořáková, Vice-Mayor of the Town of Kroměříž;

Mgr. Petr Sedláček, Vice-Mayor of the Town of Kroměříž;

Ing. Oldřich Kuchař, Chair of the Tourism Association in the Kroměříž region; Director of the Information Center in Kroměříž;

Ing. Zdena Dokoupilová, Manager of the Archbishop Castle.

The group from Banská Štiavnica was guided through the cellars and was provided with information about its use for tourism in the town. The offered dinner was an example of a service that is provided to tourists upon request. The evening spent in the Cellars was a combination of a social event and work; plenty of informal discussions were held with the above people from Kroměříž about tourism, promotion, role of the Tourism Association, involvement of the town representatives in the activities of this Association, etc.

March 8, 2003

8.30 hod – Meeting with Mr. Oldřich Kuchař and Dr. Eva Nováková; they both are the founding members of the Tourism Association in the region of Kroměříž.

Mr. Kuchař explained to the group from Banská Štiavnica how the Tourism Association in the region of Kroměříž was founded. He also talked about the goals of this Association that has 24 members at the moment. The facilities providing services for tourists, institutions, towns and villages of the Kroměříž region are among the members of the Association. The main goal of the Association is to connect in co-operation legal and physical entities, state and local administrations, associations, cultural institutions, information centers, etc. from the region of Kroměříž. The purpose of such co-operation is to have a positive effect on tourism development in the town and its region.

The group from Banská Štiavnica had the chance to see the promotion materials published by the Association, and the questions of the group were mainly focused on the technical details that determine the functioning of such organisation, problems with co-operation, financial management, etc.

9.30 – Visit in the information center

Directly in the center, Mr. Kuchař explained what service the information center provides to people. The participants of the study trip from B. Štiavnica could see the entire variety of promotion materials that are available for visitors, and the group was also informed about the future development plans.

10.30 – Guided tour of the Archbishop Castle.

12.00 – Lunch in the lounge of the former Franciscan monastery, tour of the facility and discussion about its use in tourism.

A few years ago the estate of the former Franciscan monastery was in the state of emergency. Fortunately, after it was purchased by an entrepreneur from Kroměříž, renovation works started to save the place. Presently, the entire facility consists of several buildings with multiple use: restaurant, hotel, room for social events, chapel for weddings, offices and fitness center. The reception employee guided the group through the facility and provided information on how the individual parts are used.

Great variety and professional approach in preparation (above all, the work of Dr. Nováková) define the program of the study trip to Kroměříž. The participants had a chance to look at the town and tourism development within the region from various points of view. Meetings with people and visits at various sites always evoked interest within the group from Banská Štiavnica. As a result, the discussions were very intensive and broad in scope. Taking into account the active attitude of participants from Banská Štiavnica, it may be assumed that the knowledge and experience gained in Kroměříž will have an actual impact on their future work in the town.

The representatives of the town of Kroměříž expressed their interest to pay visit to Banská Štiavnica. This is now in the stage of preparation, and hopefully these contacts will bring a good quality co-operation in the future.

The List of Participants of the Study Trip to Kroměříž

1. Ing. Ivan Gregář, Vice-Mayor of Banská Štiavnica;
2. PhDr. Jozef Labuda, CSc., Director of Slovak Mining Museum, Town Council member;
3. Ing. Juraj Čabák, Town Council Member;
4. Juraj Foltán, Town Council Member;
5. MUDr. Martin Berlanský, Town Council Member;
6. MUDr. Oľga Ferjančíková, Town Council Member;
7. MVDr. Stanislav Ďurkan, Town Council Member;
8. Ing. arch. Katarína Vošková, Director of Monument Office in Banská Štiavnica;
9. Henrieta Palovičová, Deputy Director of the School in Nature, Počúvadlo (vicinity of B. Štiavnica);
10. Irena Roháčová, Tour Guide;

11. Rastislav Marko, Slovak Mining Museum – PR Manager;
12. Pavel Heintz, Regional Travel Agency;
13. Marián László, Chief Municipal Inspector,
14. Andrej Foltán, on civil service,
15. Martin Foltán, student,
16. Mgr. Silvia Herianová, Tourism Manager

### 3. Report from study trip to Harz and Eifel region, Germany

The study trip took place between the 16th and 22th of March 2003.

The participants were:

Josef Labuda, Director of the Slovak Mining museum  
 Lubomir Luzina, Director of the Open Air Mining Museum  
 Vladimir Solar, Employee of the Landscape Protected Area of Štiavnica Hills  
 Ivan Gregan, Vice-Mayor of Banská Štiavnica  
 Sylvia Herianova, Freelance tourism manager  
 Michael Meyer, Project manager Ö.T.E.  
 Larissa Gerstenberger, Project assistant Ö.T.E.  
 Nora Fröb, Project assistant Ö.T.E.

The invited experts in the Eifel and Harz regions were:

**Mr Pracht**, vice-mayor of the town of Nettersheim  
 e-mail: nettersheim@eifel-online.de

**Mr Doetlaff**, employee of the Nature Park Hohes Venn-Eifel  
 e-mail: info@naturpark-hohesvenn-eifel.de

**Mrs Plum**, employee of the town of Nettersheim, tourism department

**Frau Schmidt**, employee of the town of Nettersheim, responsible for the experience based nature trail

**Mrs Dr. Frey**, scientific employee of the TW GmbH, responsible for the Geopark Vulkaneifel in Gerolstein  
 e-mail: webmaster@vulkaneifel-european-geopark.de; www.european-geopark.de

**Mr Radday**, director of the Oberharzer Bergwerksmuseums in Clausthal-Zellerfeld  
 e-mail: info@OberharzerBergwerksmuseum.de

**Mr Marbach**, scientific director of the Oberharzer Bergwerksmuseums in Clausthal-Zellerfeld  
 e-mail: info@OberharzerBergwerksmuseum.de

**Mrs Krillecke**, employee of the Oberharzer Bergwerksmuseums in Clausthal-Zellerfeld, responsible for the Cultural Programme; e-mail: Kulturtourismus@OberharzerBergwerksmuseum.de

**Mr Teicke**, employee of the Harz Wasserwerken, responsible for the maintenance of the lake system, Clausthal-Zellerfeld; e-mail: teicke@harzwasserwerke.de

**Mr Knolle**, employee of the Nationalpark Harz, responsible for PR and environmental education, Sankt Andreasberg; e-mail: info@nationalpark-harz.de; www.nationalpark-harz.de

**Mrs Dr. Heublein**, employee of the Rammelsberg Museum, Goslar  
 e-mail: info@rammelsberg.de

**Mr Langhammer**, leader of the department of urban planning in Quedlinburg  
 e-mail: Rolf.Langhammer@quedlinburg.de

**Mr Plate**, BauBecon, Quedlinburg  
 e-mail: ehorwedel@baubecon.de

**Mr Schmelz**, employee of the department of urban planning in Quedlinburg  
 Tel.: 03946-905732

**Mrs Schael**, general secretary of the UNESCO – World Heritage Sites Association, Quedlinburg  
 e-mail: info@unesco-welterbe.de

**Mrs Lange**, employee of the Association of the Harz Region, responsible for the Geopark Project in the Harz, Quedlinburg; e-mail: rhv@harzregion.de

**Mr Wadewitz**, employee of the Association of the Harz Region, responsible for the Geopark Project in the Harz, Quedlinburg; e-mail: rhv@harzregion.de

### **Planning of the excursion**

The aim of the study trip was to discuss tourism related themes in the Eifel and Harz regions. Therefore, experts able to speak about their practical experiences were invited.

To permit a better exchange of experiences, attention was paid to selecting experts working in similar positions as the Slovak participants of the study trip.

The thematic focus of the discussions was adjusted to the situation and challenges in Banska Stiavnica. The following themes have been selected:

### **Environmental education and nature experience**

The visit of the Nature Protection Center and the experience based education trail in Nettersheim as well as the background information provided by an employee of the Nature Park Hohes Venn-Eifel were aimed at demonstrating the influence that representatives of the town can have when putting efforts and interests on tourism and nature protection issues. The nature oriented offers, being of a special interest for children, are now an important source of income generation in Nettersheim.

### **Planning of hiking trails and visitor management systems**

The town of Banska Stiavnica is embedded in a landscape protection area. Moreover, a representative of the office of the landscape protection area took part in the excursion, therefore, a visit in the Harz National Park as well as a discussion with a representative of its administration should offer interesting insights especially with regard to visitor management systems. The Harz National Park, being strongly affected by weekend holiday traffic, is a pioneer in matters of visitor management. In addition, it has built its own Information Center in Sankt Andreasberg. This centre is very inviting and intensively visited by tourists.

### **Geoparks**

In Banska Stiavnica a Geo Park is being planned. For this reason two German Geopark initiatives had been selected to allow an experience exchange. The Harz Geopark initiative being in the implementation phase should offer some insights in the planning aspects, whereas the Geo Park Vulkaneifel should provide information about the management and maintenance of an established and well functioning Geo Park, being also a member of the European Geoparks initiative.

### **Mining museums**

Because of the impressive nature of the Rammelsberg mine in Goslar, the group was given the opportunity to visit the mining museum and the visitors mine. The scientific explanations of Mrs Heublein provided an overview of the mining activities in this famous place. With regard to experience exchange about the management of mining museums, the main focus was oriented on the visit of the Upperharz Mining Museum in Clausthal-Zellerfeld and the discussion with its representatives. The reason for this choice was that the size, structures, ways of information distribution, marketing ideas and problems seemed to show interesting parallels with the mining museum in Banska Stiavnica.

### **Cultural tourism**

The Upper Harz Mining Museum has specialised its activities during the last couple of years. In addition to information provided in the mining museum, Mrs Krillecke works on a cultural program that focuses on a lively transfer of cultural history of Harz and especially of Clausthal-Zellerfeld. Guided tours showing relicts of the mining tradition, famous historic persons and other components are considered to be a means of distinguishing from other museums and attracting people who are not too much interested in the mining history presented in the museum.

### **Revitalisation of historical buildings as a chance for tourism**

The town of Quedlinburg was selected because of the fact that it is situated in the area of the former GDR and because of its UNESCO World Cultural Heritage status, that is also true for Banska Stiavnica. The aim of the discussion with different representatives of the town was to illustrate the potential of cultural tourism that is based on the presentation of historical and protected buildings. Moreover there was enough space to discuss proceedings and emerging problems during the reconstruction of buildings in the old town.

### **System of lakes and ditches related to mining activities**

One of the tasks of the Harz Water Works Company is to preserve and maintain the system of lakes and ditches. This system shows a big similarity with the one in Banska Stiavnica, except for the fact that in the Harz region first attempts had been made to use the system for tourism. For instance, an exhibition about the functioning of the system is open to public, and a range of panels has been installed along the paths that connect the lakes and ditches of the system.

### **Lessons learned and contacts**

**Mrs Dr. Frey** presented the background and the ideas of the Vulkaneifel Geopark and spoke about the European Geoparks initiative, which could be an interesting possibility for Banska Stiavnica, too. Moreover she presented some examples in nature and gave some clear advises with regard to information panels dealing with geological themes. Mrs Dr. Frey sent some information brochures about the UNESCO Summer School organised September 2-14, 2003, to the E.T.E. office with a request to forward them to the participants of the study trip.

**Mr Knolle** from the Harz National Park handed out a paper work on the visitor management concept in the Harz region, which can be considered as an interesting material for the project because various hiking trails are planned in the surroundings of Banska Stiavnica and in the landscape protected area at the moment.

**Mrs Dr. Heublein** of the Rammelsberg Mining Museum as well as **Mr Marbach, Mr Radday and Mrs Krillecke** of the Upper Harz Mining Museum have been very pleased to get an opportunity to exchange with colleagues from the famous mining area of Banska Stiavnica. While discussing topics such as management, co-operation with partner museums and many others, they also decided that an intensification of contacts would be mutually beneficial.

The **focus on both cultural heritage** and its revitalisation has been chosen to be implemented in Quedlinburg. This may be considered as a new building bloc with regard to the promotion of sustainable tourism in Banska Stiavnica. After the reunification, the town of Quedlinburg focused their activities on revitalisation measures and the conservation of the historical heritage to create a basis for the development of (cultural) tourism in the town. At the beginning of the revitalisation process, the situation in Quedlinburg was similar to the present situation in Banska Stiavnica. So the group discussed some common problems, useful procedures and possible funding sources. **Mrs Schael** of the UNESCO – World Heritage Sites Association invited the participants of the study trip to take part in various conferences and meetings that deal with the topic of World Cultural Heritage and its connection with tourism.

## **Received documents:**

### **Town of Nettersheim:**

Information folder about the Nature Park Hohes Venn – Eifel;  
Information folder about Nettersheim;

### **Geopark Gerolstein:**

UNESCO Summer School: Geological objects: Potential for Education, Geotourism and Sustainable Development, invitation brochure;  
Information folder about the European Geoparks Initiative;  
Information folder: „Eifel – Lust auf Natur“;

### **Clausthal-Zellerfeld:**

Hand-book for the Upper Harz Mining Museum;  
Information folder „Clausthal-Zellerfeld hat was“;  
Abstract about the system of lakes and ditches „Das Kulturdenkmal Oberharzer Wasserregal“;

### **National Park Harz:**

Article about the visitor management concept implemented in the Harz region;  
Welcome to the National Park Harz;  
Recreation and environmental education in Sankt Andreasberg;  
From the UNESCO World Cultural Heritage Goslar to the World Natural Heritage in the National Park Harz;

### **Town of Quedlinburg:**

Brochure: 10 years of reconstruction – World Heritage Site Quedlinburg;  
Gestaltungsfibel – World Cultural Heritage Site Quedlinburg;  
UNESCO – World Heritage in Germany;  
Sightseeing in Quedlinburg;

### **Association of the Harz Region:**

Geopark Harz-Braunschweiger Land-Ostfalen, sub-area Harz;  
Nature Park Harz.

## **Minutes of the first round table: impressions and comments, Clausthal-Zellerfeld 21.03.03, 7 pm**

### **Participants:**

Josef Labuda, Lubomir Luzina, Vladimir Solar, Ivan Gregan, Silvia Herianova, Nora Fröb, Larissa Gerstenberger

### **Dr. Josef Labuda, director of the mining museum in Banska Stiavnica**

As a civil servant, he was interested in getting an idea on how the German State supports organisations and institutions; as a representative of the municipality of Banska Stiavnica, he wanted to learn more about the influence and the role of towns in tourism development. Moreover, he was glad to get a real picture and background information about the mining activities in the Harz region that he had earlier read about. In his opinion, the experts were very well prepared – also with regard to specific aspects that are of interest for the project in Banska Stiavnica.



**Ing. Lubomir Luzina, director of the open air mining museum in Banska Stiavnica**

As a representative of the biking society, he was very delighted about the discussion the group had with Mr Knolle. This discussion was marked by similar attitudes concerning biking and hiking activities in protected areas. As a representative of the Open Air Mining Museum he was impressed by the Rammelsberg mine and would have wished to spend some more time there. During the meeting with Mrs Dr. Frey in Gerolstein, he got some useful impressions regarding the management of Geo Parks. He felt sorry about the fact that no representative from the administration office of the water management in Banska Stiavnica participated in the study trip, because he found it very impressive how water management, tourism and nature protection was linked in the system of lakes and ditches in the Harz region. A more complex perception of this topic would be beneficial for Banska Stiavnica, too. In addition, he found it important to have a chance to compare the water management system in Harz with the one in Banska Stiavnica. With regard to the organisation and the food, he was very satisfied.

**Ing. Vladimir Solar, employee of the administration of the landscape protection area Stiavnicke Vrchy**

He was especially interested in themes related to mining and volcanic mountains. It has been a great experience for him to meet enthusiastic people as Mrs Schmidt, Mrs Dr. Heublein or Mr Knolle. He is sure to remind this attitude during his future guided walks. He was also impressed by the concept of visitor management in the Harz National Park and gave recognition to the fact that the measures of environmental education in Germany are strongly focused on young people and not only on adults. On Friday he would have appreciated to spend more time outside, for instance he would have been happy to see some practical examples of the Harz Geo Park.

**Ing. Ivan Gregan, vice-mayor of the town of Banska Stiavnica**

With regard to the water-management system and the mining history, he underlined the existing similarity between the regions that have been visited within the study trip and the region of Banska Stiavnica. He considered the kindness and the competent explications of the guides and experts as something very positive. He thinks that this is a point that the employees of the tourism sector in Slovakia need to incorporate in their work. He felt sorry about the fact that the mines in Banska Stiavnica and its surroundings have not been conserved as they were e.g. in Rammelsberg, Germany. Therefore, he will forward his impressions and suggest a better use of the presently closing mines in the surroundings of Banska Stiavnica for tourism.

**Mgr. Silvia Herianova, free-lance tourism manager**

She found it astonishing how aware the competent authorities in Germany are of the fact that tourism can offer opportunities to the people. In this context, she criticised that the authorities in Slovakia are not active enough and do not recognise the benefits of tourism related activities. She underlined that much can be accomplished when co-operation is used as a tool. She was fascinated by the positive attitudes of the German tourism stakeholders, and at the same time felt sorry about the fact that in Slovakia people choose to see too many barriers to their potential actions. Another fact is that in Banska Stiavnica the municipality is often considered to be the only body that is responsible for the lack of progress, although nobody really takes the initiative. During the study trip, she got the impression that people in Germany are more active. But she still thinks that the municipality in Banska Stiavnica does not give enough support to creative activities of people in the town and its vicinity.

## **Participants' Impressions**

(Compiled by Silvia Herianová after returning to Banská Štiavnica))

The trip to Germany was generally perceived as exceptionally well prepared in both of its parts: organisation and agenda.

### **Ing. Ivan Gregáň, The Vice-Mayor of Banská Štiavnica**

We live in a town with an abundance of tourist attractions, however, we are not able to “sell” them. In Germany, we had a chance to see places that do not have such a great potential as Banská Štiavnica, and in spite of that people were able to turn them into tourist destinations.

The greatest impression I personally had was from the visit in the region of Harz. This region is very similar to the region of Banská Štiavnica, however, people in Harz were able to preserve the mining history, including its material elements, and use them for tourism.

Both trips, to Germany and the Czech Republic, were very inspirational. (First actual results of learning in Kroměříž should be soon visible in the town center).

### **Ing. Vladimír Solár, Landscape Protected Area of Štiavnica Hills**

In my mind, there are three groups of impressions: human, organisational and professional.

Human dimension: This is related to meeting actual people in their life settings or in work, and seeing their personal attitudes that were often exceptionally enthusiastic.

Organisational dimension: It was beneficial for me to see that the tourism industry helps to decrease the unemployment rate in Germany.

Also, I was impressed by the information centers that we had a chance to see: always an abundance of good information materials for visitors and creative ideas implemented that turn the center into an attraction.

Professional: For me as a nature protectionist, the following topics that were tackled during the trip to Germany were the most interesting:

the zoning applied in the Harz National Park,

visitors' steering in the Harz National Park,

good quality environmental education.

We are also active in the field of environmental education. On the next national meeting of people who work in this field, I will present the experience from Germany.

### **Ing. Lubomír Lužina, Director of the Open Air Mining Museum**

I have to express my appreciation of the perfectly prepared trip to Germany. Considering that I am a director of an open air mining museum, I would have spent more time in the mining museums in Germany. To see them, and the entire mining region of Harz, was an eye-opening experience for me (and I think also for the other participants). We truly believed that the water management system and the mining technology that was preserved in Banská Štiavnica and its vicinity are the “greatest” on the Earth. In Harz we learnt that other exceptional places exist.

Another important thing that I noticed was that people in Germany are taught to “want” tourism. Also, people in Germany understand that they need to respect the legislation. It is different in Slovakia where people still tend to avoid to follow the legal requirements.

It was also extremely useful to see the work of communities that is based on implementing local approaches. In Slovakia, people cannot step out of the old way of “waiting for the state” to do something.

**Dr. Jozef Labuda, Director of the Slovak Mining museum**

The trip was very well designed, because we had a chance to see places that are similar to the area of Banská Štiavnica. Personally, I was perceiving things from three points of view: as a director of a mining museum, a town council member and an archaeologist.

I learnt that in order to be successful, team work is required. People have to work in teams when applying for and implementing projects. The Geopark in Banská Štiavnica is an example of a project where more people from the town should be involved in its establishment (as we saw it in Germany). It should not only be a “state” Geopark, but should become ours: our Štiavnica Geopark.

An important thing that I noticed regarding Geoparks was the fact that there were always just a very few people who were in charge of the Geopark management and maintenance.

Also, it was extremely motivational to see the German guides (mainly in museums) with their enthusiasm for their every-day work. They were very relaxed and able to improvise, always telling some unusual stories or asking interesting questions, thus keeping the attention of visitors. This experience should have an effect on the actual work in our museums. The directors of the individual departments in our museums were already given a task to change the texts they present when guiding visitors.

Regarding my personal interest in archaeology, I appreciate the chance that I could leave the group for half a day and spend the time with my colleagues in Goslar. This gave me a great deal of satisfaction.

**Mgr. Silvia Herianová, freelance tourism manager**

Tourism in Germany is perceived on a different quality level than in Slovakia. It is handled actively and this type of an approach is still missing in most of Slovakia. For me, it is always important to see what is “behind the scene”. Therefore, I was trying to understand the motivations, changes in attitudes and the driving force of people who decided to become involved in tourism development.

I saw that people at places that we visited were first of all well aware of the value of the area they lived in. This is the first most important step towards starting to think about how to take advantage of the given potential in the sphere of tourism. I saw in practice that active approach means involvement of the entire community; tourism cannot function without interdisciplinary partnerships.

I also became more aware of the fact that the successful activities we had a chance to see were always based on active local approaches. Active people with a lot of enthusiasm for work took lead in implementing measures that often changed the life of the community.

Two suggestions for the future stage of the project arose among the trip participants:

It would be a good idea to prepare educational courses for Slovak instructors of guides.

Owing to the fact that the program of the trip to Germany was very dense, there was no time to get a better understanding of problems people have to deal with in Germany. This is sometimes possible only after the official agenda is over, and people sit together at dinner time. Such moments offer a different quality of relaxed discussions.

## **List of Maps & Photographs**

**MAP I: Cervena Studna Habitat Classification**

Based on the Biodiversity team report Annex C

**MAP II: Cervena Studna Synthesis**

Based on the report of the architect Peter Mravec Annex

**MAP III: Photo Documentation of the Zila Tereza Trail Reconstruction**

Based on the report of Jan Rohac Annex

**MAP IV+V: Principles of tourism development in Banska Stiavnica**

As described in Annex A of the report