

## ENVIRONMENTAL CARE

### • ENVIRONMENTAL LAW

In 2008, The Slovak Collection of Laws published the following laws in the area of environment: 4 acts, 16 regulations of the Slovak Ministry of Environment, and 1 announcement on issuing a decree of the Slovak Ministry of Environment.

#### Acts

- Act 100/2008 Coll., which amends Act 151/2002 Coll. on the use of genetic technologies and genetically modified organisms as amended
- Act 514/2008 Coll. on handling of waste from mining industry and amendments to other laws
- Act 515/2008 Coll. which amends other laws in the area of environment protection, related to the introduction of the Euro currency in Slovakia
- Act 519/2008 Coll. which amends Act 223/2001 on waste and amendment to other laws as amended.

#### MoE SR Regulation

- MoE SR Regulation 17/2008 Coll., which declares the Special Protection Area of Trábeč
- MoE SR Regulation 18/2008 Coll., which declares the Special Protection Area of Ostrovné lúky
- MoE SR Regulation 19/2008 Coll., which declares the Special Protection Area of Ondavská rovina
- MoE SR Regulation 20/2008 Coll., which declares the Special Protection Area of Poiplie
- MoE SR Regulation 21/2008 Coll., which declares the Special Protection Area of Kráľová
- Vyhláška MŽP SR č. 22/2008 Coll., ktorou sa vyhlasuje Chránené vtáčie územie Košická kotlina
- MoE SR Regulation 23/2008 Coll., which declares the Special Protection Area of Parížske močiare
- MoE SR Regulation 24/2008 Coll., which declares the Special Protection Area of Poľana
- MoE SR Regulation 25/2008 Coll., which declares the Special Protection Area of Bukovské vrchy
- MoE SR Regulation 26/2008 Coll., which declares the Special Protection Area of Medzibodrožie

- MoE SR Regulation 27/2008 Coll., which declares the Special Protection Area of Dolné Pohronie
- MoE SR Regulation 30/2008 Coll., which declares the Special Protection Area of Cerová vrchovina-Porimavie
- MoE SR Regulation 31/2008 Coll., which declares the Special Protection Area of Žitavský luh
- MoE SR Regulation 32/2008 Coll., which declares the Special Protection Area of Sĺňava
- MoE SR Regulation 51/2008 Coll., which executes geological survey
- MoE SR Regulation 63/2008 Coll., which amends MoE SR Regulation 391/2003 Coll., which executes Act 245/2003 Coll. on integrated prevention and pollution control of the environment and on amendment to other laws.

**MoE SR Decree**

- Announcement of the Slovak Ministry of Environment 131/2008 Coll. on issuing a decree on providing subsidies to municipalities to cover costs for delegated state administration responsibilities regarding Slovakia's environment (Decree 3/2008 of April 3, 2008).

## • ENVIRONMENTAL IMPACT ASSESSMENT

The process of environmental impact assessment in the conditions of Slovakia is regulated by **Act 24/2006 Coll. on environmental impact assessment and on amendment to other laws.**

In 2008, the Slovak Ministry of Environment issued 189 final position statements to the proposed activities.

Within the SEA process, MoE SR continued to assess strategic documents that may have a major impact on environment that extends beyond national borders, as well as strategic documents applicable to the whole state's territory. 5 strategic documents were assessed within the assessment period.

In the said year were realised also trans-boundary assessments of the strategic documents of "Strategy of the final part of nuclear power industry", "Strategy of energy safety", and the proposed activity of "Increasing the output of the EMO 1, 2 nuclear power plant blocks in Mochovce" with Austria being the affected party. In the area of proposed activities, Slovakia acts as the affected party in the process of assessment of the trans-boundary activity of *"Total water management treatment project of Danube to the east of Vienna."*

Slovak Ministry of Environment continued to keep records of all assessed strategic documents and proposed activities, and implemented a complex information system of environmental impact assessment. In May 2008, another phase of building the information system for the area of strategic assessment was completed under a project funded from the PHARE - Transitional Fund of *"Completion of the information system for environmental impact assessment - part SEA"* The project included also two pioneering issues of the SPRAVODAJ SEA/EIA magazine, which are publicly accessible at [www.enviroportal.sk](http://www.enviroportal.sk).

Assessment of strategic documents pursuant to Sect.4 and Sect.7 of Act 24/2006, as well as proposed activities under Sect. 29 of Act 24/2006 (finding proceedings) was implemented also by local and regional environmental authorities.

### Outcomes of the EIA process in 2008 – the MoE SR level

Number of assessed buildings and activities at MoE SR - EIA	<b>216</b>
Number of final positions issued - EIA	<b>189</b>
Number of assessed drafts of strategic documents - SEA	<b>7</b>
Number of final positions issued - SEA	<b>5</b>

Source: MoE SR

### Outcomes of the EIA process in 2008 – the environmental authorities level

Number of assessed constructions and activities at regional and district environmental authorities - EIA	<b>584</b>
Number of decisions whether the proposed activity will not be assessed according to the Act issued by regional environmental and district environmental authorities - EIA	<b>567</b>
Number of final position statements published by regional and district environmental authorities	<b>8</b>

- EIA	
Number of assessed drafts of strategic documents - SEA	<b>79</b>
Number of decisions whether the proposed activity will not be assessed according to the Act issued by regional environmental and district environmental authorities - SEA	<b>111</b>
Number of final position statements published by regional and district environmental authorities - SEA	<b>44</b>

Source: MoE SR

Complete documentation (hard copies) from the EIA process of proposed activities carried out and completed by MoE SR since 1994 until 2004 are archived in the **EIA Documentation centre** at Slovak Environmental Agency. Documentation as from January 1, 2005 until the end of 2007, is kept at MoE SR. Information from the documentation may be requested from SEA and MoE SR.

Documentation of the processes carried out by regional and local environment agencies is archived at individual authorities.

In 2008, Slovak Ministry of Environment began to prepare amendment to Act 24/2006 Coll. as a result of formal notification by the EC, in which Slovakia was cautioned about their faulty adoption of a number of provisions of Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment as amended by law on EIA.

## • INTEGRATED POLLUTION PREVENTION AND CONTROL (IPPC)

IPPC was introduced into the Slovak legal codes and implemented through **Act 245/2003 Coll. on integrated environmental pollution prevention and control and on amendments of certain laws as amended (Act on IPPC)**.

In March 2008, came into force a MoE SR Resolution 63/2008 Coll., which amends Resolution 391/2003 Coll., amending Act on IPPC, and which regulates the process and form of acquiring a certificate of professional training to offer professional counselling in the area of IPPC. The Resolution also specifies the data to be acquired and notified by the IPPC operators before February 15 of each year into the integrated information system register.

**Slovak Environmental Inspection is the administration authority** in the process of integrated licensing and issuing of integrated licenses. The Slovak Environmental Inspection Authority carried out 236 controls of compliance with the conditions of the integrated licensing (IL) of operations. The system of integrated environmental pollution prevention and control has been developed to ensure a complex collection of data and information on the IPPC. Under the law, information system of the Integrated Prevention and Pollution Control. (Art. 6(2) of Act on the IPPC) contains:

- a register of operators, operations that require the IPPC, and operations licensed under the integrated licensing,
- register of issued integrated licences,
- data and information on operations, their emissions, and monitoring outcomes, annually provided by the operators,
- norms of the quality of environment for individual sites within the Slovak territory,
- best accessible technologies for individual industrial sectors and types of operations,
- register of authorised persons.

The IPKZ information system may be accessed at <http://ipkz.enviroportal.sk/informacny-system.php>

## • PREVENTION AND REMEDYING ENVIRONMENTAL DAMAGES

In 2007, Slovak Republic included in its legislation an EP and Council Directive 2004/35/EC on environmental liability with regard to the prevention and remedying of environmental damage (hereinafter only „directive“) through its **Act No. 359/2007 Coll. on the prevention and remedying of environmental damage and on amendment to other laws.**

Prevention and elimination of environmental damage should be implemented through the „**polluter-pays**“ rule, in compliance with the principle of sustainable development. Fundamental principle of the directive that is also reflected in the corresponding law requires the operator whose activities occasioned environmental damage or pose an imminent threat of such a damage, to be considered financially liable. The objective is to force the operators to adopt and execute measures and strategies to minimize environmental damage, as this would reduce their financial liability risk.

The law considers **environmental damage** as only **damage to protected species and biotopes, on water and on land**, rather than any damage to environment. Nevertheless, any adverse change to any of the mentioned natural resources is considered damage, regardless of whether such was caused by breaching legal provisions or by acting in compliance with them. Operators carrying out work activities defined by legislation are liable for such environmental damage. This is the case of objective liability, while the operators involved in other work activities fall under subjective liability pertaining only to the damage on protected species and biotopes.

Information system of the prevention and remedying of environmental damage was implemented – [www.enviroportal.sk/environmentalne-skody/](http://www.enviroportal.sk/environmentalne-skody/).

In **2008**, there was no environmental damage recorded in Slovakia.

## • PREVENTION OF MAJOR INDUSTRIAL ACCIDENTS

Prevention of major industrial accidents is regulated through the following legislation:

- Act No. 261/2002 Coll. on prevention of major industrial accidents and on amendments to other laws as amended (hereinafter only the Accident Act),
- Resolution No. 489/2002 Coll. which executes several provisions of Act No. 261/2002 Coll. on preventing major industrial accidents and on amendments to other laws as amended,
- Resolution No. 490/2002 on safety administration and on emergency plan as amended.

Act on accidents divides businesses by total volumes of selected hazardous substances present in the plant into **A category and B category (so-called SEVESO businesses)**.

Basic obligations of business operators with present selected hazardous substances include:

- to revise total volumes of selected hazardous substances in the plant and subsequently classify the business into a pertinent category,
- to issue a report on registration of the business by local district environmental authority.

Business registered under a given category should:

- appoint a qualified person,
- develop a programme of prevention of major industrial accidents and introduce safety control system,
- develop risk assessment and safety report,
- develop an emergency plan,
- inform the public,
- engage rescue service,
- make agreement on liability insurance,
- submit documentation for developing a public safety plan.

**Information system of prevention of major industrial accidents** for public together with authorised version for competent organs was put in practice.

Register of qualified persons in 2008 included **249 professionals in the area of prevention of major industrial accidents** and **32 emergency technicians**. The list of authorised persons in 2008 included **31 subjects**.

In 2008, the Slovak Ministry of Environment was notified of **6 imminent threats of major industrial accidents**. In **2008**, there was no major industrial accident recorded in Slovakia.

### Overview of reported events for individual years of 2003-2008

	2003	2004	2005	2006	2007	2008
<b>Imminent hazard of major industrial accident</b>	7	4	1	1	5	6
<b>Major industrial accident</b>	0	0	2	1	0	0

Source: MoE SR

## • GENETIC TECHNOLOGIES AND GENETICALLY MODIFIED ORGANISMS

The area of using genetic technologies and genetically modified organisms (GMO) within the Slovak legal code is addressed by the **Act No. 151/2002 Coll. on the use of genetic technologies and genetically modified organisms as amended by the Act No. 587/2004 Coll., and the MoE SR Regulation 399/2005 executing this Act as amended by Regulation 312/2008 Coll.**

The law makes it possible to use genetic technologies and genetically modified organisms in three ways:

- in enclosed areas (devices),
- intentional release, including
  - a) introduction to the environment,
  - b) introduction to the market.

### ◆ Using of genetic technologies and genetically modified organisms in vitro

Plans the use of genetic technologies and genetically modified organisms in enclosed areas (laboratories, greenhouses, cultivating rooms, and other enclosed facilities) is divided into four at risk categories (RC), while the RC 1 represents no or negligible risk, RC 2 means small risk, RC 3 means medium risk, and RC 4 means significant risk.

On the basis of received applications and notifications by the MoE SR in 2007, 39 facilities were entered into the register of facilities. License was given to 16 facilities for their first use of genetic technologies, while 3 facilities were given the permission to initiate the RC 2 activities. MoE SR did not object to commencement of activities in RT in 78 facilities.

### ◆ Intentional release

In 2007, MoE SR issued 1 permit for test cultivation of genetically modified corn.

### ◆ Biological safety commission

Commission for the biological safety (commission) is the professional consulting body to the Ministry of Environment of the SR in the area of biological safety. Commission administered by the department of biological safety of the Slovak Ministry of Environment of the SR has 11 permanent members and 15 experts who come from a wide spectrum of professionals in the area of science or other sectors, together with state officers appointed for the individual involved resorts, and representatives of the public, including users and citizens.

In 2008, there were 14 sessions of the commission. At the mention sessions, the Commission commented on the statements adopted by the EU, proposals to issue licenses for the first use of the facilities for genetic technologies, and on the notification reports on launching of operations in facilities.



## • ENVIRONMENTAL ASSESSMENT AND PRODUCT LABELLING

Environmental labelling of products in Slovakia has been carried out since 1997. At that time the Minister of Environment declared the **National Programme of Environmental Assessment and Product Labelling. (NPEHOV)** Gradually, over the subsequent years, environmental criteria for 32 product categories were created by the Slovak Ministry of Environment through its NPEHOV directives, decrees and notices.

On the basis of the expressed interest by producers or importers, it is possible to assess compliance of the registered products with unique conditions for the mentioned product category under the Slovak Ministry of Environment's notice (of the Ministry's decree) with the objective to grant the right to use the national environmental label of "**Environment-friendly product**". As to date, as many as 215 products have been awarded the national environmental label. Of this number, in 2008 were awarded most national environmental labels for products since the existence of environmental labelling in Slovakia, which represents 88 products.

Special regulations apply for granting and use of the European Community environmental label. Basic norms include the regulation of the European Parliament and Council (EC) No. 1980/2000 and criteria for the corresponding product category. The European Community environmental label was first time awarded in 2008 to a product from the product category of "Tourist accommodation services".

## • ENVIRONMENTAL MANAGEMENT AND AUDIT

International norms of the ISO 14000 group deal with various environmental management aspects. The ISO 14001:2004 norm sets forth the requirements for the system of environmental management (hereinafter only EMS) built on the continuous management cycle of P-D-C-A. The other norm of ISO 14004:2004 provides general provisions. Other norms and regulations within the ISO 14000 group address specific environmental aspects, including labelling, assessment of the organisation's behaviour, life cycle analysis, communication, control, and others. Functionality of the implemented EMS within organisations, together with compliance to a specific norm is verified through an audit carried out under the ISO 19011 norm and attested by a certificate.

In the course of 2008, 182 new organisations with introduced and certified EMS started in Slovakia, raising the total number of organisations with the valid EMS to 637, as of December 31, 2008. This is the biggest increment for a single year over the whole period of EMS recording in Slovakia.

### **The European Eco-management and Audit Scheme (EMAS)**

Conditions for the EMAS membership for Slovakia are set forth by the *European Parliament and Board Directive No. 761/2001 and its two implementing acts - Act 491/2005 Coll. on environmental inspection and registration within the European Community scheme for environmental management audit, and the MŽP SR Directive 606/2005 Coll., which executes Act no. 491/2005 Coll.*

Over the course of the year 2008, one organisation - SEWA, Inc., Bratislava was entered into the EMAS register of organisations, which increased the number of Slovak organisations entered in the register to 6 organisations. This qualifies Slovakia for the fifth place in the category of newly-accepted EU member countries, ranking after Czech Republic (34), Hungary (18), Poland (16), and Lithuania (8).

## • ECONOMICS OF ENVIRONMENTAL CARE

### State budget and investment policy

Funds that pertain to environmental protection and development were released from the state budget of the Slovak Republic through subsidies from budget chapters at different Ministries and from the Environmental Fund.

### Environmental investments of some government departments of SR financed from the state budget in 2008 (thous. SKK)

Department	WWTP Sewages	Other WM actions	Waste management	Air Protection	Others	Total	%
MoE SR	3 109 093	1 650 465	308 017	484 157	81 615	5 633 347	19,5
MoA SR	0	20 974	0	0	5 456 088	5 477 062	18,9
MoTPT SR	370 621	433 711	191 494	39 998	266 868	1 302 692	4,5
MoCRD SR*	79 950	159 666	62 192	10 474	401 286	713 569	2,5
MoI SR	9 647	5 586	0	54 142	18 999	88 374	0,3
MoH SR	77 213	1 122 254	14 167 242	241 550	91 191	15 699 450	54,3
MoJ SR	357	1	136	0	1	3 669	0,01
<b>Total</b>	<b>3 646 881</b>	<b>3 392 657</b>	<b>14 729 081</b>	<b>830 321</b>	<b>6 316 048</b>	<b>28 914 988</b>	<b>100,0</b>

\*Include investments from structural funds

Source: Proper resorts

During the period 1993-2008, Ministry of Environment SR designating the sum of 24.3 billion SKK to environmental investments and the Ministry of Agriculture designated the sum of 13.6 billion SKK.

### Budget grants determined on realization of environmental programs

The environmental fund was established on January 1, 2005, through Act No. 587/2004 Coll. on environmental fund and amendment to certain laws.

### Review of financed grants in 2008

Area of budget grants	Number	SKK
Protection of air and of ozone layer	73	95 396 100
Protection and rational efficiency of water	455	1 689 641 160
Including: - WWTP and sewers	300	1 145 900 160
- water lines	129	452 291 000
- anti-flood measures	26	91 450 000
Development of waste management	100	307 273 018
Protection of nature and lands	23	33 418 000
Environmental education and promotion	41	32 897 580
Survey, research and development	12	61 027 993
Accidents	2	3 221 637
Programme of rebuilding the village	203	25 000 000
<b>Total</b>	<b>909</b>	<b>2 247 875 488</b>

Source: Environmental fund

Of total volume of released assistance through a subsidy at the sum of 2 247 875 488 SKK, 75.2 % was used within the area of protection and rational use of water (including 51 % to WWTP and sewage, 20.1 % to water supplies, and 4.1 % to flood-protection measures), 13.7 % was used in the area of development of waste management, 2.7 % was used for research and development, 1.5 % used for environmental education, 4.2 % used for protection of air and the Earth's ozone layer, 1.5 % in the area of nature and landscape protection, 0.1 % in the area of accidents, and 1.1 % in the area of Village Renewal programme.

### Economic tools

#### ♦ Fees for pollution and exploitation of natural resources

In 2008, the greatest portion of fees for pollution of environment came from air pollution fees (517.585 mill. SKK).

#### Gains from selected economic tools exercised in 2008 (thous. SKK)

Sort of payment	2008
Charges for pollution of air	517 585
Retributions for tapping of waste water	288 085
Charges for loading of wastes	0
Penalisation for the failure to pay air-pollution fees	0
Financial compensation for using the biotope	468 421
<b>Payments for the using the nature:</b>	
Retributions for taking of subterranean waters	399 404
Settlements for yielding spaces	22 578
Settlements for mined minerals	84 688
Settlements for loading of gases and liquids in natural rocky-structures and subterranean places	35 795
<b>Total</b>	<b>1 816 556</b>

Source: Environmental fund

#### ♦ Fines imposed by the State administration environmental authorities

State administration environmental authorities impose fines for non-compliance with the provisions set forth under generally binding legal policies.

#### Penalties laid by executive administration for the environment during the period of 1993-2008 (thous. SKK)

Sector	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
<b>Protection of air</b>	3 771	2 334	1 644	2 220	6 176	1 847	4 328	6 016	3 545	2 564	4 893
<b>Protection of water</b>	7 850	6 733	6 038	8 887	5 858	8 030	9 540	10 603	14 832	12 679	11 940
<b>Wastes</b>	8 659	7 012	9 213	9 269	3 743	6 129	7 899	6 994	9 635	9 813	9 319
<b>Protection of nature</b>	1 893	1 659	1 498	1 581	3 532	1 255	1 421	1 607	2 703	3 227	50 992
<b>Penalization</b>		692	417	4 244	1 357	353	553	192	0	0	0
<b>Building law</b>			1 091	5 671	7 135	3 716	917	469	245	0	48
<b>Packaging</b>						5	2	1	310	0	300

Prevention of gross industrial averages						4	7	31	226	0	20
Trading with endangered species of animals and plants						43	73	81	160	0	175
Public water-supply and sewages								1	0	0	24
Integrated prevention and control								125	284	1 440	3 162
GMO								150	50	3	6
Geological works								5	0	0	0
Fishery									3	0	0
<b>Total</b>	<b>22 173</b>	<b>18 430</b>	<b>19 901</b>	<b>31 872</b>	<b>27 801</b>	<b>21 382</b>	<b>24 740</b>	<b>26 275</b>	<b>17 161</b>	<b>29 726</b>	<b>80 879</b>

Source: MoE SR

In 2008, the greatest sum of fines was imposed in the area of protection of nature (50.992 mill. SKK) and in the area of protection of water (11.940 mil. SKK).

### Environmental gains and expenses

Financial indicators of environmental protection in Slovakia are systematically monitored by the Statistical Office of Slovak Republic for 1998-2008, both as investments – common internal company expenses and yields for protecting the environment, and as expenditures of individual budget chapters.

### Environmental gains and expenses according to contemporary way of statistical showing, during the period of 1998-2008 (thousand SKK)

Domain of gains and expenses	2001	2002	2003	2004	2005	2006	2007	2008
<b>Investments</b> on protection of environment covered from state sources	1 195 411	1 070 774	891 491	797 000	1 027 000	1 143 000	858 000	1 018 000
<b>Investments</b> on protection of environment covered from foreign sources	133 748	2 164 044	328 000 <sup>1)</sup>	135 000 <sup>1)</sup>	802 000 <sup>1)</sup>	1 638 000 <sup>1)</sup>	1 594 000 <sup>1)</sup>	2 440 000 <sup>1)</sup>
<b>Current costs</b> of protection of the environment	9 209 273	11 485 181	11 389 498	13 886 000	15 100 000	23 277 000	17 452 000	14 434 000
<b>Intradepartmental disbursement</b> – wage	612 137	842 778	877 277	912 000	1 068 000	1 111 000	1 020 000	1 168 000
<b>Intradepartmental disbursement</b> – other	4 892 388	5 579 150	5 290 254	4 849 000	5 373 000	13 460 000	4 561 000	5 249 000
<b>Disbursement of organization on protection of the environment covered by other subject</b> Charges and payments to public organs and organizations	2 653 205	2 919 064	2 991 248	1 492 000	4 345 000	4 033 000	6 059 000	2 553 000
<b>Payments</b> to private person or organizations	1 051 543	2 144 189	2 230 719	6 631 000	4 314 000	4 673 000	5 811 000	5 464 000
<b>Profits from the protection of the environment</b> Sales from selling of products, tools and components	659 868	709 743	106 022	111 000	52 000	65 000	85 000	47 000
Sales from selling of technologies	16 116	1 100	30	0	0	13 000	5 000	0
Sales from provided services	477 601	1 056 806	1 497 401	4 497 000	5 613 000	4 506 000	5 758 000	7 973 000

<sup>1)</sup> without expenses of municipalities

Source: SO SR

## • SCIENCE, RESEARCH AND ENVIRONMENTAL EDIFICATION

### Science and research

Research endeavours in 2008 carried out by professional organisations within the sector focused on the following:

**State Geological Institute of Dionýz Štúr (SGIDŠ).** Its main priorities included regional geological mapping of the Slovak territory in the scale of 1:50,000. Major scientific outcomes were reached within the objective of updating the geological structure of the Slovak problematic areas. Continuing was tasks focused on elaboration of the set of geological environmental maps on the scale of 1:50 000 in selected Slovak regions. The project of Creation of geological maps on 1:50 000 for the needs of the integrated landscape management has reached its advanced level of implementation. Investigation programme within the framework of sustainable development of society in 2001 also included continuing solution of tasks focused on analysis and assessment of ground water formations, geothermal water, strategic environmental raw material (zeolite, perlite, e.g.), and fuel - energy raw material (coal, crude oil, natural gas, uranium). Addressed were also projects focusing on the elimination of harmful and hazardous substances through their deposition within the rock environment (CO<sub>2</sub>, radioactive waste), or environmental research and characteristics of ecological geogenic and anthropogenic loads. Priority tasks in 2008 also included building of the geological information system and registers. A map server located at [www.geology.sk](http://www.geology.sk) was made accessible to the public since April 1, 2008. The server is part of the GeoIS (Geological information system) project.

**Water Research Institute (WRI).** The major research projects implemented in 2008 focused on:

- The Slatinka water body - assessment of minimum flows at Slatina and the middle Hron region
- Assessing the fill-up process of the Žilina water body on the basis of transversal profiles tracking.
- The Zemplínska aquatic route - INTERREG III.A.
- Flood threat maps and flood risk maps in the Domanižanka river watershed - part 1
- Hydraulic calculations of different solution variants for rinsing the left-sided network of the Danube river branches.

WRI was a major contributor also to international scientific projects under various EU programmes.

- The NORMAN project - network of reference laboratories and partner organisations for monitoring and bio-monitoring of environment-threatening pollutants.
- The SOCOPSE Project (Source Control of Priority Pollutants in Europe) - Development of the control system for Europe
- The Project of DINAMICS – Diagnostic sensors at the level of nano-technology and micro-technology
- Capacity Building Support to the Water sector in Turkey, TR 06 IB EN 01

- Project acquired within the Operation programme of environment - Water balance monitoring in SR.

**Slovak Hydro Meteorological Institute (SHMI).** Ten projects were included among the applied research and development activities in 2008. SHMI was involved in two of the projects (the SRDA projects) as a co-authoring organisation.

- Methodology of the UV biometers calibration.
- Revision of groundwater sources of Slovakia
- Reference laboratory for the area of measurements for Air - pollution and emissions
- Development, adaptation, and maintenance of the NWP systems and applications I
- Research and development of the means for alarm signalling service and nowcasting.
- Satellite applications for hydrology.
- Setting of values for the water quality environmental standards.
- RSV implementation - Classification of surface water bodies and reference conditions
- SRDA - Micro-climatic impacts of forest vegetation in Vysoké Tatry
- SRDA - Probability design of constructions for the impacts of snow loading

SHMI as part of the consortium was involved in the Hydrological SAF project, development of satellite applications for operative hydrology. Accession of Slovakia to the European centre for the medium-term weather forecast has shown benefits in continuing improvement of the weather forecast. Since January 2008, SHMI, as part of the EUMETNET community, got involved in the process of compliance with the European Multi-services Meteorological Awareness Programme. In 2008, there was a successful presentation of outcomes of the project "Improving the flood management system". The Slovak Government consented to signing a Memorandum of understanding between our government and the Office of the Secretary of the UN European Economic Commission on the International Water Assessment Centre. This significant activity that relates to the localization of the IWAC secretary office at SHMI has the objective to cooperate with the affected parties on the integrated management of water sources and support to implement the water convention.

In 2008, **the State Nature Conservancy of the SR (SNC SR)** facilitated the implementation of a number of projects in the area of nature and landscape protection. As part of the research assignment of "Analysis of the impact of the barrier elements on national and European significant protected territories and species", the organisation monitored the barrier elements in landscape and their impact on animals. The Transport Research Institute in Žilina received a 10-year monitoring of encounters of protected animals with road transport. Studies involved 155 sites with 300 newly recorded findings of beetles, 12 information on the occurrence of fishes, and 110 entries on the occurrence of bats of the European significance. Occurrence of habitats and plant species was monitored during the EDIT-ATBI project's implementation phase in the territory of the Muránska planina National Park. All data was edited into the ISTB database (Information system of habitats and taxons).

Within the INTERCAFE project, the SNC SR in cooperation with the Slovak Fishing Association and the Society for the Protection of Birds of Slovakia participated in every-year numbering of the great cormorant in Slovakia.

Partial numbering of large predators in order to determine their numbers was carried out in selected areas. Individual organisation units of the SNC SR carried out mapping of the occurrence of other than original species of animals and plants under priority protection in the protected areas.

**Administration of the Slovak Caves** merged with the SNC SR on the basis of a decision of the Slovak Minister of environment of December 5, 2007 No. 74/2007 - 1.8. effective from January 1, 2008, and implemented other tasks and projects of basic and applied research.

Research within the **Slovak Museum of Nature Protection and Speleology (SMNPaS)** continued for the proposed European significance territories in the area of botany and zoology. Continuing works included the GPS detection and tracking of the Marmot colonies in the Západné Tatry mountain range (Červené vrchy). Research of the cave minerals of Slovakia (Slovenský karst, Muránska plane, Nízke Tatry, Malé Karpaty) was a VEGA 1/3057/06 coordinated project. Research of the cave introduced (non-native) sediments took place, together with the geomorphological research. 127 new sites were added to the national database of the Slovak caves, representing the total number of caves of 5 652, as of the end of 2008. 4 declared small-size protected areas, 2 protection zones, 13 publicly accessible caves, and 16 special protected areas were added to the State register. Projects from the structural funds were developed and accepted. Digitalisation of funds and technical support of information technologies in the area of nature protection, NATURA 2000, life-long education, Obtaining geographical coordinates of cave entrances, and completion underground karst formations archive.

Research in the **Bojnice ZOO** was focused on the protection of species and their raising by humans. Collection of data and experience in the area of Barn Owl breeding methodology continued, together with monitoring of releasing the matured birds into the open nature. Historical data on breeding of animals at the Bojnice ZOO also continued to be processed (polar bear, *Garrulax ocellatus*).

**Slovak Environmental Agency (SEA)**, as part of the project: *"Testing of the INSPIRE proposal for specification of data for topics defined in Annex 1 of the INSPIRE Directive (Hydrology and Protected Areas)"* carried out testing of a data specification proposal for the mentioned topics within the Slovak conditions. In 2008, SEA implemented also *"The Register of landscape documentations in the Slovak territory (database)"*. Its use will be within the European Convention on landscape implementation process and after the inclusion of the landscape ecological planning process into the amendment of the law on physical planning, also for this part of competencies. SEA participates as co-author in the project



of *"Analysis of material flows in the management of natural resources aimed at utilisation of agricultural biomass for energy management purposes (the SRDA 0174-07 project)"*.

Coordination of research with the objective to ensure other priorities in the area of environment was implemented through cooperation agreements with the Slovak Academy of Sciences (SAS) and the Association of Slovak Scientific and Technological Societies.

On January 15, 2008, the MoE and the President of SAS signed an updated **Agreement on cooperation in the area of environmental research and monitoring between the Ministry of Environment and the Slovak Academy of Sciences**. It aims at a closer cooperation between both institutions. Environmental research and monitoring by the SAS continued in 2008 through the VEGA, 6-7 projects. RP EU, SRDA, COST, ŠPVV, UNESCO, ESF, and others. In 2008, the VEGA agency assisted in 123 projects aimed at the protection of environment. In 2008, SAS, through its 10 organisations, implemented 18 projects with the results used in the area of environment protection, funded by the Slovak Research and Development Agency (SRDA) In the same year, the SAS institutions were involved in 76 projects of international scientific and technical cooperation (6.FP, 7.FP, COST, NATO, UNESCO, SOCRATES, and others) with focus on environment.

Also in 2008, the Slovak MoE and the SAS cooperated at the development of a representative essay called **Landscape Ecology in Slovakia**. The document was presented at the 7th IALE world congress in Wageningen (Holland), on July 8-12, 2007.

Slovak Ministry of Environment and the Slovak Academy of Sciences cooperated on the area of **genetically modified organisms**, at establishing a reference laboratory for monitoring, qualitative and quantitative analyses of genetically modified organisms and DNA tests for the Slovak MoE. In 2008, the Slovak MoE continued its cooperation with the SAS on the project of **Monitoring of seismic phenomena in the Slovak territory**, which is part of monitoring the geological environmental factors, etc.

## **Environmental edification**

### **Presentations and exhibitions**

- Enviro Nitra 17.04. – 20.04. 2008
- Recycling – Innovation - Separation Banská Bystrica 22.04. -25. 04. 2008
- AQUA Trenčín 23.09. – 25.09. 2008

With the exception of permanent expositions of the SMNPaS in Liptovský Mikuláš, various expositions and exhibitions were organised by specialised organisations within the resort. Similarly, various presentations were organised in the hallway of the Slovak MoE building.

Throughout the whole year, the Ministry of Environment organised touring exhibitions also in other organisations. It has become a tradition that these exhibitions enrich various events of nature-related focus.

♦ **Conferences, seminars, workshops, round tables**

In 2008, MoE SR in cooperation with professional organisations within the sector organised a number of events for professionals and general public alike:

- The World Day of Wetlands - conference
- The issue of large predators in Slovakia and the EU countries
- Declaration of new protected bird territories, negotiations with the European Commission
- Technologies for reclamation of biological waste at the municipal level - a workshop for local governments
- 13th professional seminar for workers of accessed caves
- 7th meeting of the Council of Europe for implementation of the landscape convention
- Hydrochemistry 2008 - conference with international participation
- World Water Day - Let us protect water and it will protect us - XIV. annual international conference
- Earth Day - announcement of a media campaign - Let us clean our Slovakia
- A Council of Europe workshop on the European Landscape Convention - Landscape strategies and management: integrated spatial management
- Enviro-i-forum - IV. annual conference for the professional public, focused on the development of computer science in environment in Europe, and the achieved advances in this area in Slovakia
- Relevant issues of nature protection in the NATURA 2000 territories in national parks - conference
- Environmental policy and economic development of Slovakia

♦ **Festivals, competitions, and projects for the public**

**ENVIROFILM 2008** - XIV. international festival of films, TV programmes, and video-programmes with the topic of creation and protection of environment, this year with the motto: "Life for Future". The festival took part in May 12-17, 2008 in Banská Bystrica, Banská Štiavnica, and Kremnica. 165 films from 32 countries from all around the world were nominated for the main competition. More than 10 000 visitors from all over Slovakia and different countries came to the event. The festival included the conference Landscape - man - culture, various exhibitions, lectures, workshops, and competitions.

**DANUBE DAY 2008** - International Danube day - June 24, 2009 took part in Bratislava for the 5th time, with the central motto Shared waters - 14 countries - joint responsibilities - let us protect Danube!

**Festival of wits, crafts, and fun** - XI. annual event in Banská Štiavnica, this year focused on textile and clothing.

**Cap á le Est** - Journey to the East - European festival of poetry, theatre, and music. This 6th annual event was dedicated to the Roma, as well as other minorities.

**Hypericum** - physical exercise and trivia competition for young people - tenth anniversary of the national competition focused on the promotion of the system of protected areas of the EU member countries (NATURA 2000) on June 24, 2008.

**Children to nature** - VI. annual competition took place in September 25 - 26, 2008 at CEE Drieňok in Teplý Vrch. This year, the event featured the issue of NATURA 2000.

**Fair of the environmental educational programmes of Šiška** - organised in 2.10 - 4.10.2008 was the 9th year of an annual fair organised at the CEE Teplý Vrch, with the main topic of education toward nature and landscape protection specialised on NATURA 2000.

**Enviroquestions** - THE ENVIRONMENT OLYMPICS - IV. annual national correspondence trivia competition for pupils of the higher school classes (5th -9th) dedicated to the topic of environment.

**ProEnviro** - 4th year of an annual competition looking for the best environmental project organised by the school.

**Summer camps** - water world, camping in the museum

**School in the Museum and Let's play Science** - long-term projects that involve education activities of all museums assembled within the Slovak National Museum.

**Living Gallery Project** - cooperation with schools at increasing the environmental awareness of pupils and students.

### **Publication activity**

Major periodicals published in the sector of environment included the MoE SR Journal, Enviromagazine magazine, Aragonit, Mineralia Slovaca, Slovak Geological Magazin, Protected areas of Slovakia, Protection of the Slovak Nature, Water management bulletin, publications of the State of the environment report, Water in the Slovak Republic, Slovak Karst Journals, Naturae Tutela, Sinter bulletin, ZOO news. Further activities of the MoE in 2008 included the publication of: Waste - Damoclean Sword of the civilisation, and Environmental loads - The unwanted legacy.

Besides these periodicals, the edition plan included annual reports, journals from various events, educational methodological workbooks, taxonomic identification guides for plant and animal species, advertisements and educational brochures, posters, pamphlets, cave guides, maps.

The following promotional and educational films were produced and presented:

- National Parks in Slovakia
- GMO in Slovakia
- Environmental loads
- From the life of water
- Waste - bad conscience of the civilisation
- Danube - the Slovak greatest river

### **Environmental Law and Access to Information**

In 2008, on free access to information and amendment to certain laws according to **Act No. 211/2000 Coll.**, were registered 1 492 applications. 58 personal inquires have been processed directly by the public office.