## C.2 NATIONAL AND REGIONAL SPATIAL DEVELOPMENT CONCEPTION

### 1. THE 2ND DRAFT OF SLOVAKIA SPATIAL DEVELOPMENT PERSPECTIVE

### 1.1 General

The assessment of the nation-wide spatial development has been elaborated continuously by the Ministry of Environment (ME SR). The latest 2<sup>nd</sup>. Draft of Slovakia Spatial Development Perspective included approved conception material designed for the nation-wide territory and the materials were designed under the direction and co-ordination of the ME SR are available.

- The objectives of the spatial development and Slovakia's steps towards integration into European structures involve;
- the need of a coordinated spatial integration within European territory
- the creation of conditions for competitiveness of each region
- the conservation of landscape, natural and cultural values of individual regions
- building of communications infrastructure and other technical facilities

## 1.2 Population

Slovakia's population was 5.27 million, according to the 1991 Census, and reached to 5.37 million in 1997 according to the latest data of the Statistic of SR. The recent trend of very low population growth back up that the demographic development is expected to be around zero in the forthcoming period. The one of the major reasons of the low population growth is lowering natural increase rate. Both Nitra and Banska Bystrica Kraj showed a natural decrease in 1995.

In 1996, the Statistics Bureau of the Slovak Republic issued the Population Growth Projection to the year 2015. According to the projection, the population of SR will be 5.34 million (low-growth variants) to 5.46 million (high-growth variants). The analysis of future population projection by the Kraj and Okres was made by the AUREX Consultant. Table C.2-1 shows the result of the analysis, including migration factor.

Table C.2-1 Population Projection of SR by Kraj (Thousand)

	1995	Low-growth variant			High-growth variant				
		2000	2005	2010	2015	2000	2005	2010	2015
Bratislava	618.3	627.8	637.4	643.0	641.1	629.1	640.7	649.0	650.9
Trnava	548.0	551.3	554.1	553.1	546.9	553,4	559.0	562.2	560.4
Trencin	609.8	611.0	614.0	613.8	605.4	612.7	617.0	618.4	613.8
Nitra	717.6	713.2	708.9	700.7	685,9	716.0	715.4	711.5	702.0
Banska	664.0	661.1	661.0	658.1	647.3	664.4	666.9	667.9	662.9
Bystrica									
Zilina	685.4	688.3	694.0	696.2	689.8	693.1	703.0	710.3	711.4
Presov	768.7	779.5	794.7	807.9	811.3	783.2	801.3	818.0	829.1
Kosice	756.0	765.1	775.4	786.2	781.1	767.9	781.4	792.9	797.9
SR	5	5	5	5	5	5	5, 5, .	5	5
	367.8	397.3	439.5	455.0	407.7	419.8	484.7	530.2	528.4

Source, Slovakia Spatial Development Perspective, ME SR 1999. (Ref. 5-27)

# 1.3 Tendencies of the Growth of Economy

Table C.2-2 shows the development of selected macro-economic indicators in 1993 to 1996.

Table C.2-2 Selected Macro-economic Indicators 1993 - 1996

Indicator	1993	1994	1995	1996
GDP growth compared to 1993	-3.7	4.9	6.8	6.9
(%) *1)	ik gardinaberi. Pilotoperio		e i se centralista de la composición della compo	
Annual inflation rate (%)	25.1	11.7	7.2	5:4
Unemployment rate (%)	12.7	14.6	13.8	12.6
Trade balance (bill, SK)	-26.9	2.6	-5.7	-64.5
State budget balance (bill, SK) (2)	-23.0	-22.9	-8.3	-25.6

Note; \*1) preliminary data based on selected quarterly GDP indicators and \*2) preliminary data for 1996.

Source; Slovakia Spatial Development Perspective, 1999 (Ref. 5-27) based on data of the Statistics Office of the Slovak Republic

## 1.4 Development of Urban Centres and Settlement Structure

The essence of that of social development consists in the transformation process from 'industrial society' to 'information society'. In the forthcoming period, Slovakia is expected to accomplish the development of the Sector III, which is, service-producing and service-distributing sector, with the parallel development of the Sector IV, that is, information-producing and information-distributing sector. At the same time, further improvement of Sector I (food and semi-finished goods producing and distribution) and the Sector II (goods producing

and distribution) is expected respecting ecologisation of production, processing and utilisation of the products.

It is assumed that the settlement development will be significantly influenced by the recreation and tourism elements. It will be manifested in spatial accessibility of weekend recreation activities in larger cities, constantly growing incorporation of rural municipalities into tourism activities and direct positive influence of that process on the development of both urban and rural settlement.

# 1.5 Settlement structure of the Slovak Republic

- settlement core area of nation-wide and/or international importance is designated in the Banska Bystrica Zvolen area within the Study Area
- settlement core area of supra-regional and even nation-wide importance are not designated in the Study Area
- settlement core areas of regional importance are designated in the Levice and Ziar areas within the Study Area
- settlement core areas of local importance are designated in Brezno and Banska Stiavnica within the Study Area

Territorial and regional development of Slovakia shall be directed towards the achievement of territorial-wide system of ecological stability, genetic resources and biodiversity conservation, saving cultural heritage and also towards optimum land use. This goal can be achieved only if the existing state of ecological stability, i.e. stability of biotic and abotic systems.

Forests cover 41% of Slovakia's territory. Despite a negative heavy impact of inflow emissions on forested areas, one can find vast areas of preserved original forests. They represent a significant part of the European natural heritage. As far as biodiversity concerns, numerous areas of secondary communities, which have been created by a man's centuries-long activity, are priceless. The most affected and degraded areas include lowland, mead a wetland ecosystem.

### 1.6 Natural Economic Region

Physical-socio-economic regions can be considered as background territorial entities from the point of view of natural capacity in combination with economic characteristics. They can be considered as territorial entities for the preservation of regionally sustainable development.

The following regions have been determined as the physical-socio-economic regions in the Study Area;

- the region of Dolne Pohronie (Tekov Hont).... mostly in Nitra Kraj
- the region of Stredne and Horne Pohronie....mostly in Banska Bystrica Kraj

### 1.7 Agriculture

"The Conception and Principles of Agricultural Policy in the Slovak Republic" intends the following strategies;

- ensuring both healthy nutrition and nutritional sufficiency for the population; to ensure the self-reliance of Slovakia in food supply,
- economic stability, the income adequacy of agriculture and the regionally balanced development,
- cultivation and conservation of the farmland; ecologically oriented economy in the country; not to allow heterogeneous substances to enter into the food chain,
- sustaining agriculture in non-competitive, especially mountain regions, as for the development of landscaping, ecological and social functions of rural settlement, and
- improving the quality of life in rural areas

The basic structure of the arable soil has not been changed significantly in the recent years. It can be expected that the reduction of the arable land area will continue because the ways of utilisation of the degraded and/or very poor soils will be changed. A decrease tendency in farmland area is expected in the future due to the construction of motorways and other communications.

"The Conception and Principles of Farmland Management Policy" intends restructurisation of the agricultural production, especially in the livestock production to sustain the socio-economic development for individual counties with protection of natural and biological resources.

Compliant with the "Principles of Economic Policy" It is a permanent intention in a mediumterm horizon;

- to revitalise qualitative development of agricultural food industry to maintain selfreliance in food supply and guaranteed sufficient healthy nutrition of the population
- to facilitate the increasing export competitiveness of the production, and to ensure both ecological requirements in farmland management and environmental functions of the farmland space.

## 1.8 Forestry

The GDP of the forestry management in 1995 was 7.5 billion SKK, which is 1.4 % of the GDP. Besides that, the wood processing industry's GDP share was more than 7 %.

The forests covered approx. 2 million ha, 41 % of the territory of the country, which is on an above average European level.

The share of forest management forests represents 68.2 %, the forest which fulfil ecological and protection function cover 14.6 % and the forest fulfilling specific function cover 17.2 % of the total overgrown area.

Unfavorable development of the health of the forests is caused by the impact of harmful agents. Therefore, the attention should be focussed on the strengthening of ecological stability and resistance of the forests. It can be said that the state of health of the Slovakia's forests has been deteriorated. The worsened health of the forests has been caused primarily by the civilisation factors, particularly by the emissions and consequent harmful agents.

### 1.9 Water Management

## (1) Water resource exploitation

A long-term average annual water resources capacity on the territory of SR is represented by an annual water outflow of about 12.9 bill. m<sup>3</sup>. Further capacity is represented by state borderland water whose exploitation has to be compliant with international treaties. Exploitable capacity for the spatial development is substantially lower.

### (2) Water flow and flood protection

"the Conception of Water Management Policy", recommended the following;

- to continue in: the flood protection management, draining off the waters from the territory; the maintenance of water flows and water works; the technological and safety supervision,
- to ensure the needs of the surface water consumers, and the conditions for the utilisation of hydro-energy potential, and the conditions for water transportation, all with regard to effective water management,
- to finish the most important incomplete constructions to cover urgent needs and make prompt benefit of invested means,
- to ensure the preparation of agreed investment projects to cover the water quality and/or water management service requirements,

- to gradually revitalise the water flows, primarily where the water flow sections have been abandoned due to improper treatment, and
- to push through and gradually implement large-scale measures which improve water management conditions (revitalisation measures).

## (3) Water reservoirs

"the Conception of Water Management Policy", recommended the following;

- complete the construction of water reservoir of Turcek on the river Turcek (for the areas of Prievizda, Handlova and Ziar nad Hronom),
- to launch the construction of the water reservoir of Slatinka on the river Slatina, for the Mochovce nuclear power plants, and ensure irrigation system on the Dolny Hron area.
- To complete the construction of Gabcikovo water works on the river Danube and other priority projects.

It can be seen that a gradual decreasing tendency in the service water intake by the industry, however, the other activities have shown an increasing demand. The reconstruction of traditional heating and power plants, which are more water demanding, but they will be environmentally friendly. The agricultural scoter had exhibited a decline in water intakes in the period 1991-1993.

## (4) Public drinking water supply and sewerage

The public water supply covered 79.4 % of the total Slovakia's population in 1995. The Cover ratios in the Study Area were 84.1 % and 73.2 % in Banska Bystrica and Nitra Kraj respectively in the same year.

The public sewerage system covered 52.5 % of the total Slovakia's population in 1995. The cover ratio in the Study Area was 53.4 % and 42.1 % in Banska Bystrica and Nitra Kraj respectively.

# 1.10 Industry

The industry includes raw material mines, processing industry companies, gas, water and energy production and distribution companies. The goods production represented 497.2 bill. SKK in 1995. The private sector's production share in the total industrial production was 64.6%.

A dynamic development of the industry has been achieved in the sectors of pulp and paper

industry, paper products, printing and publishing, production of chemicals, chemical products, chemical fibers production, manufacturing of transportation means, metallurgy and metal products.

The gross turnover of the industry was 514.5 bill. SKK in total SR in 1995. The regional contributions to the production were 8.9 % in Banska Bystrica and 7.5 % in Nitra Kraj. According to industrial output efficiency (in 1995), the two regions are classified as follows:

- Banska Bystrica Kraj belongs to the 1<sup>st</sup>. group; the regions whose industrial output efficiency is above average
- Nitra Kraj belongs to 3<sup>rd</sup>. group; the regions whose industrial output efficiency is lower than average

### 1.11 Recreation and Tourism

Further development of recreation and tourism is focused on the achievement of recreational effects through utilising the area conditions (mountain, lakes, rivers, and artificial facilities)

Mountain recreation tourism is one of priority categories. From a nation-wide view, the most important are those territories which meet the criteria of their original area natural value, accessibility and the proximity to larger urban centres. Those territories are used for i. large-scale tourism on nation-wide and/or international level, ii. weekend recreation of the inhabitants of larger cities, and iii. combination of the both function. The stay at water areas has been significantly changing, mainly thanks to the establishment of new water areas (water reservoirs, excavated areas) in nation-wide. The demands for the specific interests included hunting, horse-riding, golf are also increasing.

The following type of recreation and tourism also important to develop;

- Spa tourism
- Rural tourism
- Transit tourism
- Culture tourism

### 1.12 Transportation

The Study Area is located in the following important transportation-urban corridors:

central-south transportation and urbanisation corridor of Trnava – Nitra – Zvolen –
 Lucenec – Roznava – Kosice (one of the 2 major west-east corridors)

• the central corridor of Vrutky - Martin - Turcianske Teplice - Banska Bystrica/Kremnica - Zvolen - Krupina - Sahy (minor north-south corridor)

For the prioritisation of the Slovak Republic transportation system development, it is considered from the following two aspects;

- (1) From the transportation-urban point of view;
  - the reflection of the transportation infrastructure of the European corridors primarily in the lines of Slovak transportation-urban corridors (to design the highest quality transportation infrastructure in the transportation-urban corridors that cover the highest intentional, nation-wide and regional level),
  - the priority interest of the state to enable fast, quality and safe link of the Slovakia's territory to Bratislava,
  - the achievement of a high efficient link of two transportation-urban areas with their centres (Bratislava and Kosice) and also to their sub-centres (Zilina/Martin and Banska Bystrica. Zvolen),
  - the network of the capital cities of the regions with additional natural transportation centres in the territory (Nove Zamky, Poprad, Lucenec, Michalovce/Humenne),
  - subregional transportation relations on the level of counties formation.
- (2) From the natural point of view;
  - large-area protected territories and national parks arranged according to both the hierarchy and importance of individual elements of Slovakia's transportation system,
  - the principles of mountainous areas sustainable development charter,
  - natural conditions, preconditions for recreation and free settlement structure of the north and central Slovakian territory,
  - reduction of emissions in the exposed natural environment through the electrification of railway tracks and supporting a combined transportation.

One of the important internal transportation interest of the State related to the Study Area is the homogenisation and redirection of the central north-south corridor into the route of Trstena – Ruzomberok – Martin – Turcianske Teplice – Kremnica/Banska Bystrica – Zvolen – Lucenec/Krupina – Siatorska Bukovinka/Sahy, to mitigate traffic concentration on the route Ruzomberok – Donovaly – Banska Bystrica.

(3) The draft of a superior road communication network

The superior road communication network within the Study Area, according to the 2<sup>nd</sup>. Draft of Slovakia Spatial Development Perspective, to be completed consists of,

- i. A string of speedway according to transportation corridor
  - the southern corridor; I/63 Bratislava Dunajska Streda Nove Zamky, I/75
     Nove Zamky Velky Krtis Lucenec, and I/50 Lucenec Roznava Kosice
  - the central corridor from the south-west to the north-east; I/51 Trnava Nitra,
     I/65 Nitra Ziar nad Hronom Sasovske Podhradie, I/50 Sasovske Podhradie
     (Ziar) Zvolen, I/66 Zvolen Banska Bystrica Brezno
- ii. 1st. class roads with speedway sections
  - the central corridor from the west to the centre-south; I/50 Trencin Banovce –
     Prievidza Ziar nad Hronom Zvolen Detva Lucenec
  - the central north-south corridor; I/59 the Slovakia/Poland frontier Trstena Dolny Kubin Ruzomberok, I/65 Martin D1 Turcianske Teplice Kremnica Sasovske Podhradie (Ziar), II/577 Turcianske Teplice Banska Bystrica, I/66 Banska Bystrica Zvolen Krupna Sahy the Slovakia/Hungary frontier.
- iii. High-speed railway tracks in the west-east; Bratislava Nitra Zvolen Kosice Ukraine
- iv. Upgraded railway tracks
  - Zvolen Filakovo Kosice, electrification of the track
  - Zvolen Banska Bystrica, electrification of the track
- v. Electrified railway tracks
  - Martin Diviaky Banska Bystrica
  - Banska Bystrica Brezno Telgart Margecany
- vi. Main railway stations and nodes in Zvolen
- vii. Combined transportation line network
  - C-E52 Marchegg Bratislava/Rusovce Sturovo
  - Vrutky (Martin) Banska Bystrica Zvolen, Filakovo Siatorska Bukovinka
  - The southern line of Palarikovo/Nove Zamky Levice Zvolen Filakovo Plesivec – Kosice
- viii. Combined transportation terminals
  - Zvolen as international importance
  - Nove Zamky, Sturovo and Banska Bystrica as intra-state importance
- ix. the international water way of E 80 Dunaj and port of Sturovo
- x. the regional public airport for international transport at Sliac

## 1.13 Energy

Short-term objectives of the power industry conception include the following items;

- To ensure energy demand-supply balance (for the time being, there is a 90 % dependence of the Slovak Republic on the import of primary energy resources. This is why the ensuring of energy resource demand-supply balance is the priority of energy management. The strategic aim is to achieve a balance between the energy production and consumption and to maintain that balance in the forthcoming years).
- To upgrade and restructure the production-technology basis (which is being solved in all corresponding industries energy, gas, oil, coal mining).
- To create conditions for the utilisation of renewable and secondary energy sources, for the reduction of energy costs, and for the implementation of cost saving programme (within this goal, the issues of really utilisable potential is monitored, i.e. the potential of hydro-power plants, forest biomass, biomass from wood processing industry, agriculture and other producers, biomass from waste materials and waste-water treatment plants, waste heat, municipal and industrial waste, geothermal energy, sun and wind energy).
- To fulfil the commitments issuing from international agreements and SR legislation 8th energy impact on the environment) and harmonisation with the EU legislation.
- To link the Slovak Republic to the European energy system.

### 2. THE 1ST DRAFT OF SLOVAKIA SPATIAL DEVELOPMENT PERSPECTIVE

The followings are the summary of the 1st. Draft of Slovakia Spatial Development Perspective, issued by ME SR in 1994.

# 2.1 Objectives and Principles

The objectives and principles of the National Spatial Development Conceptions are:

- 1) From "Eastern States" to the "Western States"
- 2) The gradual incorporation of SR into European structure.
- 3) The economic incorporation into the European Union.

The principles of the territorial development of SR are as follows:

- 1) Creation of a relatively homogeneous poly-central settlement system
- 2) Support of spatial and settlement links between the regions
- 3) Construction of hierarchy networks nation-wide to get better access to European destinations
- 4) Support for gradual development of supranational links(international conceptions of spatial development and Trans-European infrastructure networks)

5) Boosting national regional centres with the aim of creating a counterbalance/partnership with European agglomerations.

### 2.2 Land Use Policies

The land use policies of the territorial development of SR can be summarised as follows:

- Compliant to legal regulations, protection of both the existing and planned protected areas should be provided with the purpose of maintaining major and precious natural ecosystems, the biological diversity, character and stability of the landscape.
- Protection of further significant features of nature, bearing the function of regional and local biocenters, biocorridors, or interaction components of the landscape, as well as protection of other remarkable natural and man-made landscape components should be provided in these categories: protected sites, natural features and protected trees.
- Special care should be devoted to the protection of territories registered in the international protected area network (biosphere reservations) or protected under international agreements (world heritage sites, internationally relevant wetlands)
- Special attention should be paid to the protection of plant and animal species, mineral and fossils in planning and controlling land use in the Slovak Republic.
- In spatial development and physical planning in the Slovak Republic, the priorities, principles, and targets, identified in the document "State Environmental Policy Strategies, Principles, and Priorities", approved by the Slovak Government and National Council of the Slovak Republic, should be observed.
- With the attempt to create an optimal landscape, complex professional and public evaluation of planned constructions, establishments and associated activities should be undertaken, in compliance with the Environmental Impact Assessment Law.
- Air protection policy should reflect spatial development and land use planning, the authorised limits on air protection and associated legal regulations, namely the Regulation on Identification of Areas Requiring Special Air Protection and on the Operation of Smog Alarm and Regulation Systems. Automatic air monitoring network information on airborne emission status, and information on current and expected climate changes, resulting from the increasing greenhouse effect, should also be permanently taken into consideration. International liabilities arising from previously concluded international agreements and protocols on air protection should be respected.
- Functional use projects should not affect farmland organisation. High-grade farmland, and farmland upgraded by drainage and other reclaiming measures for maintaining and increasing its production and ecological functions should be especially protected.
- On a national spatial scale, it is imperative that protection of the state mineral deposits, especially exclusive mineral deposits, be considered in the functional organisation of the Slovak territory.
- The impact of anticipated use of secondary raw materials stored in heaps and setting pits (as secondary mineral deposits protected by the Mining Law) should be reconsidered.

- Stemming and future decline in noise pollution should be the focus of spatial development and of development of activities and functions across the Slovak Republic.
- High radon risk regions should be avoided in siting new housing developments. Alternative functions for high radon risk built-up areas should be identified.
- Excluded hygienic protection zones of potential radioactivity sources in the Slovak Republic should be respected in designs of functional spatial arrangements. This concerns the Jaslovske Bohunice Nuclear Power Plant, the Mochovce Nuclear Power Plant under construction, and associated active waste disposal sites.
- In accordance with the National Health Support Program, physical planning should serve as a tool for attaining targets outlined in the Health Protection Strategy and the Health Development Strategy though the design of functional and practical spatial arrangements.
- Urban focus is essential in monument protection. This is relevant in a thorough protection of listed Conservation Zones (established as late as in 1989), with 69 declared and 250 proposed listed Conservation Zones).
- Land use process should consistently observe the provisions and legal requirements for water resource protection, i.e. for spatial restrictions applying to such territories.
- Development of settlements and of their basic components should be absolutely subject
  to a development of adequate systems for sewage water collection and treatment with
  sufficient capacity and quality performance. Engineering means should be created to
  prevent accidental pollution risks to underground and surface water resources, primarily
  in the immediate vicinity of water resources contact zones and in water resources
  protection areas.

### 2.3 Agricultural Policy

- Afforestation or highly extensive exploitation of farmland, currently labeled as low
  productivity pastures, will apply to 380 thousand hectares of category 9 and 10 soil
  production. This implies that in the near future most of the category 10 soils (seasonally
  not exploitable soils) and category 9 soils(low-production and excluded from farmland
  production) with the exception of villages situated in these extreme conditions will be
  affected.
- Reduction of arable land acreage by 180 thousand hectares and their transformation to meadows and pastures. There is a realistic forecast that such changes will apply mainly to category 8 of very low efficiency arable farmland (very low production arable land and permanent production pastures) and category 7 (low-production farmlands). Such a transformation may be expected in a relatively short period.
- Afforestation of soils with significant hazardous contamination or their transition to non-farming purposes (nationally this applies to relatively small areas).
- Reduction of farm produce by a reduced soil input intensity and also by produce structure modification to grow industrial crops will not result in a significant farmland acreage change. On the contrary, legislative measures to prevent such moves will take an ever-stricter form. This will apply to soil categories 1-6, representing a range of the highest productivity to low productivity soils, with the largest Slovakia farmland percentage.

In light of spatial development in Slovakia, exploitation of soil for farming and non-farming purposes (apart from afforesting) will continue to be contradictory and regulated.

Compliant with the National Council of the Slovak Republic Decree, a document "Complex Program for Farmland Use Production Potential, including Ecological Aspects, Economic and Legal Implementation Mechanisms" has been compiled. This material specifies and details tasks assigned in the "Conception and Principles of Agricultural Policy for the Agricultural Production Restructuring and Relocation."

## 2.4 Forestry Policy

Forests currently cover about 40 % of the Slovak territory. Total forest acreage, including both wooded and bare areas, was 1 991 107 ha as of January 1993.

Substantial portions of Slovak forest (about 199 000 ha) are in National Parks under special protection status. The forests assume a significant role in ecological stabilization and as landscaping factor in over 16 Protected Landscape Areas (approx. 500 000 ha).

The function of landscape protection, ecological stability and biodiversity of forests and forest ecosystems should be increasingly enhanced. Large-scale damage to the forests as a consequence of global changes in sun radiation, air, and subsequently soil pollution, local changes in hydro and tropic properties of soil and mismanagement of forests are some of the major concern of forests today.

The state of health of the Slovak forests is disquieting. The forests are dying not only in the vicinity of emission sources, but also across vast mountain areas, inflicted with pollutants not only from local, but also from foreign sources carried in by winds (imported air pollution amounts to 65 %). The rate of damage, impairment and dying is increasing, not only for coniferous, but also for deciduous trees.

In the forest land ownership structure (1993), the privately owned forests comprise 16.8 %, cooperative and commercial ownership 22.7 %, forests belonging to church denominations 3.0 %, forest management companies own 1.4 %, public forests represent 9.5 %, and other forms of ownership are 0.9 %. Restitution rights have been claimed to 54.2 % of the total forest acreage, presently managed by forest management companies in the competency of the SR Ministry of Forest and Water management. Under these circumstance the top priority remains to be maintenance and reproduction of forest genofund.

Afforesting farmland, unsuitable for farming purposes, should be considered in the design of development and functional land use in Slovakia (180 000 ha, of which 60 ha are in urgent need of afforestation).

## 2.5 Industrial Policy

The industrial policy is aiming to reach a point, when all the industrial sectors will be incorporated in the European economic structures by the turn of the century. The basic industrial development priorities are;

- (1) an enhancement of infrastructure systems,
- (2) the growth of small and medium-size enterprises, and
- industrial sectors restructuring schemes e.g. cuts in energy intensity, environmental improvements, growth of export sales, increased competitiveness in industrial production, higher rate of domestic raw materials use, increased value added from production, and
- (4) creation of employment

After the collapse of socialism, the industrial production program has proved to be oversized. This is why, depending on sector type, certain degree of modification has been in effect. Such a process will result in maintaining, upgrading, retrofitting, even establishing new productions in the existing manufacturing facilities, or identifying other ways of putting these premises to a more efficient use.

The future industrial production trends will decline in scope and structure, as a result of the general historical policy towards over-dimensioning. This statement is valid mainly for the basic production sectors, such as the mining, machine, defence production and power industries.

In terms of spatial development this implies, that in some productions and industries a continuing fall in jobs and a lack of new enterprises should be expected in the short-term. In spatial perspective, the principle is to totally restrict the establishment of new industrial sites. The present and near-future program will include reconstruction and upgrading of the existing production facilities. It is only those operations with sound sales outlooks or those sited in highly developed infrastructure and transport network areas that stand a better chance for further growth.

Further monitoring of industrial production is needed in the spatial development and settlement areas and settlement development lines, as well as on regions outside the main settlement thrust, economically rather neglected. The production process should be monitored primarily in regions of economic degradation, inflicted with the conversion process, where the introduction of profitable industry can mean a significant start for regional development in an attempt to achieve social and economic stability.

In terms of land use, concentration of the central production is to be found in the area of;

- Bratislava,
- Trnava,
- Area along the central Vah valley (extending from Novo Mesto nad Vahom to Martin),
- Upper Nitra basin, central Hron valley up to Banska Bystrica, and
- The triangle configuration of Vranov Humenne Michalovce.

Other individual representatives of these trends are the towns of;

- Nove Zamky,
- Komarno,
- Nitra,
- Ruzomberok,
- Liptovsky Mikulas,
- Lucenec,
- Poprad,
- Presov, and
- Kosice

# 2.6 Power Industry Development Policy

It is the purpose of power concept to supply all of the users with fuel and energy while maintaining minimal production costs with the least possible ecological impact. The purpose is also to deliver the energy safely and reliably and to put it to efficient use.

The basic power production alternative anticipated the operation of the existing V-1 and V-2 nuclear power stations in Jaslovske Bohunice until the end of their operational life, with the V-1 planned shut down before 2000. Completion of the Mochovce Nuclear Power Plant is planned. Ecological projects are anticipated for;

- major fossil fuel power plants at Vojany and Novaky
- district heating plants at Kosice, Bratislava, Trnava, Zilina, Martin and Zvolen

The hydro power programs are to be boosted by a completion of the Danube power plant, and major hydro power plants at Zilina, Sered, Streeno, Wolfsthal and Ipel, as well as by a series of minor hydro power plants on upper Vah, Orava cascade, and Poprad - Topla cascade.

\* Where ecologically acceptable, priority should be given to exploitation of hydro potential.

Also a Kosice geothermal power plant and 11 combined cycle power/heating plants 200 MW each are in consideration. Additional links are to be constructed, namely Poland, and after the Stupava - Vienna power line construction also with Austria.

Sufficient mining production of domestic fossil fuels is needed to cover the needs of the Novaky power plant. Bituminous coal imports will drop, yet coke and briquettes will continue to be used on the same level.

Natural gas consumption will go up to 77 % compared to 1992, with applications in the power industry, households and services. This will call for the expansion of International Gas Line 1, diversified gas imports from at least three independent suppliers, construction of a parallel ADRIA gas line, and increase of underground gas storage capacity. Gas will be provided from Norway via Poland and from the North Sea via Denmark and Poland.

\* Gas consumption should be prioritized according to the proximity of gas lines.

Crude oil is imported via the Druzba pipeline from Russia. The Adria pipeline is out of order due to war conditions in the former Yugoslavia. Slovakia will benefit from a construction of the Schwechat - Slovnaft oil products pipe line.

Non-conventional and renewable energy sources;

- sun energy (for water heating),
- wind energy (high investment costs),
- geothermal energy (on 25 planned sites)
- minor hydro power plants and micro hydro power plants
- forest biomass,
- commercial and industrial waste (ecological consideration requiring special modes of operation),

- biomass from waste material (with limited use),
- waste heat from condensation power plants (suitable for agricultural purposes),
- · waste heat from industrial plants (for local use), and
- low potential heat from natural sources.

### 2.7 Water Management Policy

There has been a permanent decline in water resources consumption from surface water sources since 1990. The drop between the 1990 and 1992 surface water consumption is 381.4 mill. m<sup>3</sup>. These trends do not reflect, however, any efficiency-derived savings in industry. Instead, they reflect a current economic recession.

Long-term water supply predictions anticipate that a need for cost reduction will drive the industrial consumers to make substantial water saving. The present water consumption drop in agriculture is a result of a reduced consumption for irrigation purposes. Increased underground water consumption recorded in 1991-1992 was a consequence of increased water consumption for public supply system by 17.3 mill. m<sup>3</sup>.

Mineral springs in Slovakia represent a potentially high element of economic development of the country. Their present exploitation is inadequate, with untapped reserves for bottling and hydro- and balneotherapy. Thus export sales and recreation needs may be met easily.

Geothermal water resources potential of Slovak has not been exploited adequately. The surveyed therm-energetic potential is presently utilized on 35 sites. The total flow rate of those resources is 601 l/s and associated energy consumption is 83 MW. Higher rate of exploitation is planned by a regional power scheme (Power Supply Conception of the Slovak Republic).

Significant rivers comprises 8 437 km, i.e. 18.9 % out of the total river network of 44 666 km. (In 1996, 37 786 km, 84.6 %) Of these 3 156 km, i.e. 41 %, have been regulated. (In 1996, 10 888 km, 28.8 %)

The flood regulation provides protection for the area of 4 896 km<sup>2</sup>. (The area protected against flood Q 10 and more is 7 948 km<sup>2</sup> in 1996) Area endangered by flood Q 100 was 5 598 km<sup>2</sup>, i.e. 11.3 % of Slovakia in 1996.

There are presently 70 major water reservoirs built across Slovakia.(360 in 1996), maintained by the Water Management Authority. Their total volume is 1 618 mill. m<sup>3</sup> (2 730 mill. m<sup>3</sup> in 1996), with a retentive volumes of 168 mill. m<sup>3</sup> (264 mill. m<sup>3</sup> in 1996)

By 2005, according to the water management conception,

- water works Turce on the Turiec river should be completed,
- the Tichy Potok project on the Torysa river should be finished,
- water reservoir Garajka on the Ipoltica, and
- reservoir Slatinka on the Slatina river should be launched,

## and subsequently;

- Horny Vah
- Zilina
- Sered and
- Selice na Vahu hydro power plant should be built.

There is a long-term project of Bratislava-Wolfsthal water works expected to start in 2005, if the Austrian partner renews its engagement.

Public water supply covered 77 % of inhabitants in 1992 and 79.7 % in 1996. This trend will continue to grow. From among 2 831 villages only 1 600 (56 %) are served by a public water main in 1992. The adverse effect of public under-supply is most evident in the districts of; Levice, Nitra, Lucenec, Rimavska Sobota, Velky Krtis, Humenne, Michalovce, Presov, Stara Lubovna, Trebisob and Vranov n. Toplou in 1992.

Further efforts in upgrading the drinking water supply standard from public mains will focus, in addition to central settlements, also on an increased rate of supply of small village settlements (the public water supply in 2005 is expected to reach 84 – 85 % of inhabitants).

The drop in overall water production in 1993 posed the first decline of specific water consumption since 1980 from 400 litters/person/day to 379 litters/person/day. The same tendency is manifest in the households, the specific water consumption having dropped to 172 litters/person/day in 1993. The water management policy estimates a specific consumption drop in households by 2000 to 167 litters/person/day.

\*Water consumption should be economized, restricting the future average national drinking water consumption to 270 litters/person/day by 2000, respecting the demand differentiation.

Drinking water consumption from the public water supply system by other consumers has been since 1990 equal to 40 % of the invoiced volume. It is anticipated, that economizing trends will become evident following the transformation of the economic base and the modification of water and sewage prices to market standard, resulting in assumed water consumption saving by 103 litters/person/day for other consumers.

A steady growth of the amount of water not invoiced, amounting to 148 335 000 m<sup>3</sup> in 1993, which is 25 % of the total volume of produced water, is alarming. A reduction of this value to 15 - 17 % would mean in national terms a reduction of un-invoiced water by approximately 51 000 to 62 000 thousand m<sup>3</sup>/year, i.e. 1.6 - 2.0 m<sup>3</sup>/sec.

The investment water supply development scheme, implemented in the '90s, and the planned short-term projections are intended to address the backward public water supply situation in the Okres of

- Nitra,
- Levice,
- Velky Krtis
- Lucenec,
- Rimavska Sobota,
- Trebisov,
- Humenne

The projects in Prievidza and Ziar nad Hronom districts are also meant to cope with obvious dis-proportions of water resources capacity. Special attention is paid to drinking water supply solutions for settlements within a protection zone of Machovce Nuclear power Plant.

Along with the construction of new supply capacities, the reconstruction of the existing network and facilities is also of crucial relevance. 20 % of the entire scope of network and facilities in 40 towns of over 10 thousand inhabitants is in need of refurbishment, and over 10 % of the network and facilities are in emergency conditions, to be rebuilt anew. The top candidates calling for such system reinstatement are Banska Bystrica, Banska Stiavnica, Novaky, Krupina, Kosice, Presov and Bratislava.

The development of sewage lines and wastewater treatment plants falls behind the construction rate of the water supply system. In 1992, only 50.9 % of all people lived in homes connected to a public sewage system. (53 % in 1996). The worst situation in this respect (in the range of 28.2 - 30.4 %) is in the Okres of;

- Vranov nad Toplou,
- Komarno,
- Velky Krtis,
- Trebisov,
- Cadca and
- Dunajska Streda, and
- Site in the protected water management area of Zitny Ostrov.

As many as 25 % of districts are below national average. Only 283 villages have an established public water supply system with 164 operating wastewater treatment plants. A number of towns over 10 000 people are only equipped with the public sewage system, or their system is without a treatment plant, such as Hiohovec, Trencin-the right riverbank, Sturovo, Krompachy, Gelnica, Svidnik, etc.

The outcome of this situation is evident in the proportion of river pollution from public sewage systems of 70 %. The resolution of this situation with high hygienic and water management hazards commands a decisive launch of sewage system and treatment plant construction projects. Future settlement development projects will have to be governed by the availability of adequate, acceptable hygienic sewage and treatment facilities.

- \* The physical conception should put an emphasis on upgrading the sewage system and treatment plants availability to serve not less than 57 % inhabitants by 2005.
- \* Land use development should observe a complex approach to the river basins revitalization with the aim of revitalizing life in rivers deliberately regulated to slower flow rates, to increase the accumulation capacity of a territory, to reduce flood water outflow applying flow control instructions and measures for hydro-ecological plans in river basins and land systems of ecological stability.

### 2.8 Waste Management Policy

34 million, tons of waste were produced in 1992 (23 million, tonnes in 1996), including 9 million, tonnes of special waste, 1.6 mil, tonnes of communal waste and 3.3 million, tonnes of hazardous waste. The current situations in waste management are inadequate and insufficient. There are 7 204 registered municipal tips in the country, of which 335 were approved, while no tip complies with authorized conditions for controlled disposal sites.

The Ministry of Environment of the Slovak Republic had prepared a Waste Separation and Collection Conception for Secondary Raw Materials and Communal Waste Management.

# 2.9 Transportation Policy

## Transport corridor

International transport relations and Trans-European transport systems are subject to the progressive unification of Europe. The position of the Slovak Republic offers the best conditions for construction to all the operated transport systems of European significance. However, the geomorphologic character of Slovakia partially prevents their implementation.

There are six main transport corridors, which also are incorporated into Trans-European transport infrastructure;

- the northern corridor
- the southern corridor
- the western corridor
- the eastern corridor
- the central north-south corridor
- the central east-west corridor

The following transformation nodes of international significance are recommended;

- Bratislava node with transformation functions for the motorway, high-speed railway, air and water transport (compliant also to the Transport Development Conception (TDC) - SR Government Decree No.166/93),
- Zilina node with transformation functions for the motorway, high-speed railway, air and water transport (compliant also to TDC),
- Kosice node with transformation functions for the motorway, high-speed railway, and air transport (compliant also to TDC),
- Komarno-Nove Zamky node with transformation functions for the motorway, highspeed railway, and water transport (compliant also to TDC),

- Cierna nad Tisou node with transformation functions for the railway, and water transport (compliant also to TDC),
- Trencin node with transformation functions for the motorway, high-speed railway, and water transport (compliant also to TDC),
- Zvolen-Banska Bystrica node with transformation functions for the motorway, railway, and air transport.

Based on the above principles, the plan has proposed various measures, projects, and policies on;

- Road network(motorway and major roads)
- High-speed and upgraded railway network
- Water Transport
- Combined transport
- \* "Transport Development Conception", approved by the SR Government in Decree No.166/93.

### 2.10 Health Policy

Preventive care, presently represented only by recreation and sports, requires more state involvement. In terms of land use this will involve facilities located within the housing estates, settlement areas, complementary settlement areas, as well as in recreation communities and future communal spas with rehabilitation and recreation and recreation functions.

Medical care facilities (hospital, clinics) should be upgraded to provide service on a broader scale. Rehabilitation care is in desperate need of local spas and rehabilitation facilities, in addition to the existing traditional spa centres.

Preventive care and rehabilitation services (except for the spa centres) offer schemes to be pursued by private entrepreneurs. A hot topic to be dealt with within the state health care system is long-term care of chronic patients and of old peoples, including senatorial, domestic care services, and social services.

Hospital capacity in the Slovak Republic, expressed as the number of beds, rose in the period 1980 - 1991 to 40 037 beds in 1991 from 35 463 beds in 1980, i.e. by 7.56 beds/1 000 people. The lowest bed capacity of 3.93 beds/1 000 people is in Vranov nad Toplou, 4.23 in Bratislava -

outskirts districts, 4.97 in Dunajska Streda, 5.27 in Cadca, 5.52 in Povazska Bystrica, and 5.9 in Stara Lubovna.

The districts with the highest bed capacity - over 10 beds/1 000 people - are; Kosice - City (13.42), Bratislava - City (10.95), Michalovce (10.94), Banska Bystrica (10.71), Martin (10.55) and Svidnil(10.34).

Exploitation of thermal and mineral springs and development of spa centers for medical treatment is also one of the elements, indicating an expansion of economic activities. Spa services, playing a significant part in the health care pattern, should and may participate in the social and economical development of centers across Slovakia. There are currently 24 spa centers of varying size and relevance. Most of them are located in smaller towns and villages, comfortably accessible from the major business centers. The only exceptions are the spa towns of Piestany and Bardejov. Where the spa function is not the smaller spa towns the spa provides most jobs for the local population.

Important issues on health policy are;

- growing rate of coronary and heart diseases
- a continuous increase in cancer diseases
- the overall number of diabetes patients
- growing psychologically induced and psychosomatic disease
- a high respiration system disease rate
- a high mortality rate
- a growing rate of injuries
- an increased percentage of risk pregnancies
- a large number of allergies

Improvement of living standard, life and work conditions, distress, harmful habits and low food quality are necessary (The National Health Support Program, 1991)

### 2.11 Housing Policy

The existing housing rate was 307 in 1991 and goals are defined as follows;

Table C.2 - 3 The existing housing rate \*1)

	Year	Housing Rate		Population (1 000)	Number of housing stock (1 000)		Net increase	h(1 000) housing	
	1.00	Minimal	Optimal		Minimal	Optimal	Minimal	Optimal	
	1991	307	307	5 247.3	1 618.7	1 618.7			
į	2000	307	319	5 515.9	1 693.4	1 760,0	74.7	141.3	
	2010	319	345	5 717.6	1 824.0	1 973.0	130.6	213.0	
	2015	330	360	5 744.2	1 895.6	2 068 0	71.6	95.0	

Source: "Conception of State Housing Policy Before 2000", the Ministry of Transport,
Telecommunications and Public Works of the SR, June 1994.

Note.

Telecommunications and Public Works of the SR, June 1994.

1) Number of housing units per 1 000 people and Current housing standard of European countries is 400 housing units / 1,000 and 360 housing units / 1,000 in Czech Republic.

## 2.12 Recreation and Tourism Development Policy

The main targets of recreation tourism will remain the mountains in central north Slovakia - the mountain ranges of Mala Fatra, Velka Fatra, West, High and Low Tatras, Slovak Paradise, as well as major lakes )Otavska priehrada dam, Liptovska mara dam, Domasa dam, Zemplinska Sirava water reservoir) and hot spring swimming pools.

Cultural tourism will primarily apply to the towns of Bratislava and its surroundings, Trnava, Piestany, Trencin, Nitra, Zilina, <u>Banska Bystrica</u>, Kosice, to regions of Spis, Liptov, Stiavnicko, to spa and individual sites (castles, mansions and manors, monasteries, churches, museums, folk architecture, new engineering works - such as the water works Gabcikovo - festivals, commercial fairs, national gathering at places of monumental value, pilgrimages, etc.).

Transit tourism is gaining momentum, with the main thrust on north-south routes across Slovakia. Political changes have also induced revaluation of several regions, especially along the borders. Border-side projects for recreation and tourism areas and features should correspond with the needs for short-term recreation of potential foreign tourists.

An inevitable condition for tourism development is the formulation and approval of legal regulations, and the identification of methods for the financing of lacking infrastructure constructions. Building a national and regional tourism information system is also a vital condition.

#### 3. REGIONAL PLANS

### 3.1 Banska Bystrica Kraj

The followings are the summary of "Legal Regulations of Territorial Planning and the Building Code" published in 1999, made by ME SR, which states compulsory part of territorial plan of

large territorial unit of the Banska Bystrica Kraj. (Annex No.2 to Government Order No. 263/1998 Coll.)

# (1) Agriculture

- to respect agricultural soils and support their utilisation throughout their whole scope, and agricultural soil in categories compliant with soil-ecological and productive categories.
- to implement unique set of management practices, stated in the SR Act No. 287/1994 in the nature and landscape conservation areas, and protection zones of water sources.
- to implement functional differentiation of the territory in utilisation of forest soils.

# (2) Industry, exploitation and civil engineering

- to support the principle of reconstruction, liquidation and intensification of the existing zones, areas, sites and occasional basis, objects.
- to support development of current sectoral structure of industrial production with main orientation to consistent modernisation of technological process and facilities, decreasing of production costs and energy demand on production, increasing the rate of finalisation, quality and usable characteristics of products.
- to create territorial and technical conditions for the development of industrial and building production and exploitation of minerals in Okres Banska Stiavnica and others and for elimination of narrow-scale production in Okres Detva so as to comply with the existing conditions of natural and urban environment and with the demographic situation of the Okres, and for recultivation and ecostabilisation measures in the territories impacted by surface and sub-surface exploitation.
- to implement exploitation of minerals considering justified needs in such scope and by such approach to prevent excessive negative impacts on environment.
- to respect protected deposit territories and designated exploitation sites.

## (3) Recreation and tourism

- to regulate development of function-spatial sub-system of recreation and tourism in compliance with natural conditions of the region in Okres Banska Stiavnica, Brezno, Detva and Revuca.
- to create conditions for development of short-term recreation of inhabitants of urban centres through building recreational zones and residential structures.
- to create territorial and technical conditions for development in the residential centres through modernisation of existing and building of new service, relaxasation and sport facilities, on the significant automobile routes and on cycle-tourist routes.

- to increase the scope and quality of services in the existing tourist sites with best conditions for both winter and summer season.
- to develop conditions for recreation and tourism in full compliance with interest of nature protection and to redirect the centre of development from uninhabited areas into village and rural areas.
- to increase quality of the existing recreational and tourism centres on the National Park of Nizky Tatry and Muranska plane and the proposed national park of Velka Fatra and the Protected Landscape area of Polana, while preserving their current lodging capacities.
- in the area of international tourism to create conditions for utilising the area of Banska Stiavnica included on the list of the world heritage sites of UNESCO, through building appropriate services of international standard.

### (4) Ecological aspect, nature conservation and soil

- to respect territorial delimitation, conditions for protection and utilisation of all declared protected areas including the Protected Landscape Area, the National Park, the National Nature Reserve, the Natural Reserve, the National Natural Monument, the Natural Monuments and the Protected Area.
- to ensure legal protection for the proposed protected territories National Park of Velka Fatra and the other protected territories.
- to implement in economic utilisation of territories protected pursuant to the SR Act No. 287/1994 on nature and landscape protection and a differentiated approach to economic practices and to prefer biological and integrated methods of territorial protection, involving the measure to respect high priority of ecological and environmental function of forest with zero to wood-producing significance located in the declared and the proposed protection territories of the category of the National Nature Reserve, the National Natural Monument and the Natural Monument.
- to adjust direction of transportation and technical infrastructure through an
  ecological network element so as to maximally ensure their conductivity and
  homogeneity.
- to eliminate through system measures stress factors that influence the elements of the territorial system of ecological stability (effect of industrial and transportation exhausts, contamination of water streams, etc.).
- to respect agricultural and forests soils as a limiting factor of urban territorial development, especially to protect agricultural soil with very high to mediumhigh production potential and agricultural soil with built hydro-melioration devices, and to respect special measures for increasing its production ability (production of plantation and vineyards).

### (5) Cultural heritage

 to respect cultural heritage, especially to preserve the most valuable objects included into the category of urban monument reserve, monument reserves of folk buildings, monument zones and national cultural monuments, to respect them and use them in compliance with provision of the Act No. 100/1997 on state protection of monuments.

- special attention to be paid to the territory and the city of Banska Stiavnica, listed in the world heritage sites of UNESCO.
- to eliminate negative consequences of exploitation realised underneath historical mining cities, which are their upper mining horizons threaten stability of buildings as well as complete historical building complexes.
- to regulate further utilisation of cultural monuments and memorial territories and adjust it to protection conditions for individual sets of monuments designated in the draft measures to be preserved.
- to pay special attention to the sites or recorded, famous and assumed archaeological sites.
- to ensure compliance with policies of the monument protection on the territory of historical town centres which are not regulated by the legal monument protection provisions, as well as in parts of a territory with preserved historical urban structure and historical buildings.
- to ensure active protection of architectural monuments, selected typical craftsman and industrial objects, monuments of railway transportation including unique sections of routes such as Telgart Cervena, Brezno Tisovec, Ciernohronska rail, railway route of Banska Bystrica Diviaky).
- to ensure protection of valuable objects and urban complexes from the late 19<sup>th</sup> century and the first half of 20<sup>th</sup> century.
- to protect and maintain historical landscape elements and complexes (urban parks, parks on the territories of castles and mansions, etc.).
- to support protection and preservation of urban and architecturally valuable areas of pilgrimage as a significant landscape-urban territorial elements.
- to create conditions for protection and renovation of memorial objects in free landscape (fortresses, castles, ruins, etc.) as historical documents and significant composition elements in landscape image.
- to respect typical forms and structures of inhabitation characteristics in specific sub-regions in relation to building practices, folk arts, typical forms of economic activities and links to nature environment.
- to implement and respect type and functional characteristics of residences of urban, small-town and various forms of rural inhabitation including typical scattered villages of central and southern part of the region.

## (6) Transportation

- in the area of physical development of road, railway and air transportation, see
   ANNEX D: Summary of Environmental Management Projects and Proposals Relevant to the Basin.
- to prefer direction of roads with heavy traffic load outside the built-up rural
  area, territories of recorded water sources, water dams under preparation and
  protected areas, to create conditions for continual realisation of tunnel
  construction on proposed traffic routes.

- to reserve space for perspective corridors for high-speed routes as reserved areas with assumption of its continual specification through next stages of territorial planning documentation.
- to reserve protection zones of airports and their security facilities.
- to create conditions for protection of territory around transportation routes with substantial intensity of traffic load against negative traffic impacts, to monitor compliance with acceptable noise level and to determine principles of protection of the affected territory against the impact of noise through proposal and subsequent implementation of noise-protective measures.
- to prepare on a preferable basis and to realise necessary adjustments of transportation routes in the most burdened and most dangerous sectors, and in areas with the highest burden on environment from transportation.
- (7) Water management, electricity, gas, telecommunications and waste management
  - in the area of physical development of technical infrastructure, see the approval projects on water management and electricity, see ANNEX D. Summary of Environmental Management Projects and Proposals
  - to reserve space for perspective small water dams according to water management plans of individual catchments.
  - to prefer use of natural gas for heating to supply different areas, aiming to the goal to decrease local air-pollution load.
  - to ecologise production and consumption of heat and if possible to utilise local energy sources.
  - to complete construction of basic network of information system of the Slovak Post Office Bratislava – Nitra – Kosice and connection of district and entitled post offices to participate in this network.
  - to reserve space for perspective routes of long-distance optic cables.

#### (8) Protection and creation of environment

- to support step-by step realisation of national programmes directed to decreasing the emissions of carbon dioxide and other gaseous substances.
- to initiate and motivate more significant implementation of heating media and fuels with lower rate of environmental pollution through control activity and adapting necessary measures especially in transportation, heat and power management.
- special more strict protection of water management systems and their catchments pursuant to the Decree No. 10/1977, which regulates water streams and their catchments and designates the list of significant water management streams.
- special more strict protection (protection zones for all sources of drinking water) pursuant to the Act No. 138/1973 on water.
- to create territorial and technical conditions for construction of necessary capacity of facilities for elimination and liquidation of hazardous waste.

- to reserve space for perspective regional landfills of municipal wastes and capacity for utilisation of re-usable waste.
- to eliminate waste dumps in areas endangering the environment.

## (9) Territorial planning

• in developing follow-up documentation of territorial planning of residential units and zones, documentation of territorial planning and development concepts of different regional areas and municipalities with the goal of permanent protection of natural environment of the National Park of Nizke Tatry to implement principles of development of the recreational function of landscape units and tourism limits according to the territorial and management policies for management plan of large territorial unit of Nizky Tatry, approved by the government order of SR No. 79 of 1 February 1996.

## 3.2 Nitra Kraj

The followings are the summary of "Legal Regulations of Territorial Planning and the Building Code" published in 1999, made by ME SR, which states compulsory part of territorial plan of large territorial unit of the Nitra Kraj. (188 Government Order of 28 April 1998)

# (1) Agriculture and forest

- to take into consideration, in the framework of further development, agricultural soils and forest as one on the limiting factors of urban development.
- to take into consideration the protection of permanent cultures in declared wine and hops-growing areas.
- to ensure anti-erosion protection of agricultural soils through using vegetation
  in the framework of development of territorial adjustment projects, as well as
  through agro-technical measures directed on optimalisation of the structure of
  grown products building on the elements of territorial system of ecological
  stability.
- to support alternative forms of agriculture on protected territories, in the zone of hygiene protection, and on territories included into a territorial system of ecological stability.
- to extend the size of forest lands (by 3 937.16 ha) to unforested sites that are agriculturally non-usable and on territories of forest trees which are listed in cadasters of real estates under the category of agricultural soil (white territories).
- in updating the forest management plans, to include into the category of protective forests, on the basis of assessment of site conditions, and in compliance with effective legislation in forest management, relatively most arid forest types of oak vegetation level.

- to create territorial-technical conditions for preserving stability of forest vegetation of meadow territories, to prevent non-professional interventions into hydrological conditions in regard to flood preventive measures.
- to ensure in the area of forest management a continuous regeneration of natural wood composition of vegetation through more sensitive approaches, to increase the share of forests of special purpose, to preserve original remnants of climax forests in relation to innovations in forest management plans.
- not to scatter integral forest complexes when proposing corridors of technical infrastructure and line constructions.

### (2) Industry, exploitation and civil engineering

 to determine exploitation sites of exclusive deposits of minerals and facilities for exploitation, refinement and processing of minerals, and sites and facilities for the use of geothermal energy.

## (3) Recreation and tourism

- to regulate development of function-spatial sub-system of recreation and tourism in compliance with natural and civilisation while meeting demands of the inhabitants, mainly the city of Nitra and other larger cities, on everyday and weekend tourism, as well as demands of those involved in domestic and Trans-border tourism on educational and recreational tourism.
- to regulate the formation of functional and spatial subsystem toward creating more consistent recreational areas, so-called recreational landscape units.
- from Sturovo with possibilities to use the river Danube and Hron for water tourism and cycle-tourism including the territory Bruty with Kovacov and Chlaba and the Poiplie with its cultural structures (Bina, etc.).
- to support point sites in agriculturally active landscape, mainly areas of thermal swimming pools and water bodies.
- to achieve the closest possible connection between recreational tourism and recreational tourism.
- to support the most significant recreational facilities for international and border tourism.
- to create conditions for development of rural tourism and agrotourism.
- to locate all necessary technical equipment in residential centres in proximity of recreational target areas, and to locate in the surrounding landscape only that part of technical equipment which is closely related to carrying out activities in connection to natural conditions.
- to facilitate above-standard endowment for all main tourist traffic routes.
- to create complex service-rendering facilities for motorists on completed and planned international traffic routes.
- to finish construction of a complex system of services for travellers on international routes of railway and water transportation as an extension to the system in the EU countries.

• to support the connection between the international cyclist route alongside the river Danube with routes toward Hron river basin and other basins.

### (4) Ecological aspect, nature conservation and soil

- through implementing the elements of territorial system of ecological stability, especially biocorridor to ensure protection against soil erosion in place with intensive wind and water erosion.
- to eliminate the effect of stress factors (waste dumps, conflict zones, etc.) on territories of elements of the territorial system of ecological stability (to solve this issue at the level of specific projects as well as local territorial systems of ecological stability).
- to revitalise regulated streams, to complete accompanying vegetation through planting lanes of domestic trees and bushes alongside the streams, to increase the share of grass vegetation on sites of surrounding microdepressions which gives rise to conditions for implementing the proposed biocorridors alongside the streams, and to implement these measures in compliance with the projects of landscape adjustments of territories.
- to renew through appropriate technical, biological, ecological, economic and legal measures the original character of the landscape in territories that are affected by substantial construction activities (e.g. near water bodies) and by exploitation of minerals (gravel fields, quarries, loam fields) and in territories affected by adverse impacts from industrial activities.
- to favour natural recovery of vegetation, to comply with natural composition of wood by species for given types (continuous replacement of introduced trees by natural species), and to restrict as much as possible large-scale clearing exploitation).
- to be sensitive in implementing recultivation approaches in wine-growing areas
  the goal to preserve natural biocorridor, and in case of large-size with erosion to
  increase the share of ecostabilising elements.
- to regulate development of recreational activities in areas that from the elements of territorial system of ecological stability, and in forest ecosystems to utilise the recreational potential in compliance with their carrying capacity.
- to ensure elimination and recultivation of abandoned quarries with the goal to incorporate them into natural landscape.

## (5) Cultural heritage

- to ensure elimination and recultivation of abandoned quarries with the goal to incorporate them into natural landscape.
- to respect cultural heritage, especially declared cultural monuments, declared and ready-to-be declared urban sets (urban monument reserves, monument sites and their protection zones).
- accept and continue to build new structures in conformity to historically developed inhabitation structure with the goal to reach their mutual functional and spatial interconnection while preserving identity and specific of original inhabitation.

- cultural and historical urban units and architectural objects to areas, not only
  through compliance with their protection zones, but in broader scope exceeding
  the requirements of monument protection, which means through considering
  also other variables of environment.
- the potential of cultural, historical, social, technical, economic and other variables characteristic of a given territory, either in tangible or intangible sense and to create for them a suitable environment.
- typical form and structure of inhabitation typical for different ethnic and cultural and socio-economic units and natural climatic areas, dominant typological phenomena of original and cultural landscape, morphology and climatic conditions.
- to implement typological and functional prophylation of individual centres of urban and small-town character, and various forms of rural inhabitation including dispersed rural structure.
- potential of such cultural, historical and social values and phenomena, which
  are continually active in a given area and represent development impulses of
  the region (wine-growing traditions, ethnic, cultural and social tradition,
  historical events, famous names and artifacts in the whole delimited territory).
- to accept historically created dominants while planning for the future and in the landscape perspective.

# (6) Transportation

- in the area of physical development of road, railway and air transportation, see ANNEX D: Summary of Environmental Management Projects and Proposals Relevant to the Basin.
- (7) Water management, electricity, gas and telecommunications
  - in the area of physical development of technical infrastructure, see ANNEX D. Summary of Environmental Management Projects and Proposals
  - on the flood protection zone, to carry out maintenance on regulated streams with the goal to maintain constructed capacities.
  - on the flood protection zone, to improve water management conditions on small
    water streams and their catchments through interventions directed to
    stabilisation of conditions in case of extreme flood situations, as well as in dry
    season.
  - on the flood protection zone, to ensure primarily the protection of extramunicipal space and also of large agricultural active areas against floods, through enclosing unregulated sectors of Hron and other rivers.
  - in the sector of internal water flow, to carry out regular maintenance of discharge canals in order to secure flow, and to reconstruct water pumps in order to increase their capacities.
  - in the sector of water tanks and water transfer, to ensure water transfer from Danube into the Hron catchment.

- in the sector of public water piping in compliance with Concept of water Management Policy of Slovak Republic of 1994 to ensure:
- discharge of waste water into recipients pursuant to Act No. 138/1973 Coll.
   And pursuant to Government Order of Slovak Republic No. 242/1993 Coll and protection of underground water sources and other water resources through construction of sewerage systems and waste water treatment plants, and
- removal of sewerage in centres with constructed public water system and development of sewerage-removal in developed centres.
- to ensure complex utilisation of tested sources of geothermal water for heating, agricultural and recreation purposes.

### 8) Waste management

- to solve the problem of waste elimination in the territory of the Kraj in compliance with approved updated programs of waste management of Slovak Republic.
- to prefer in waste management the concept of waste minimisation, separated collection and waste categorisation with the use of economic instruments and legal measures.
- to solve the issue of current waste elimination in the Kraj of landfills that comply with technical conditions with orientation to existing and planned largecapacity regional landfills.
- to extend separated collection of reusable parts from municipal waste in other municipalities of the Kraj including separation of problematic substances.
- to ensure better use of biological waste through constructing other composting facilities
- to build collection centres for hazardous waste and problematic substances including their containment and to ensure their appropriate elimination.
- to ensure elimination of hazardous waste from industrial and medical sector designated for incincration by appropriate facilities complying with determined time limits
- to ensure continuous liquidation or re-cultivation of contained landfills and old environmental loads, with liquidation of at least four landfills before the year 2000 and at least 6 landfills before 2005 in each Okres.
- to liquidate primarily those landfills located in areas of elements of regional territorial system of ecological stability and in territories where these landfills pose a direct threat on environment and ground water.
- to provide for sites for construction of facilities for elimination, post-separation, and composting of waste.
- to provide for sites for emergency landfill for disposing biological and other waste in case of natural disasters, malfunctions, epidemics, etc. at least on one site in the Kraj.
- to provide for sites on the territory of the Kraj for planned system of collection centres and containment of hazardous waste.

- To determine the sites and facilities for landfilling of waste which comply with technical conditions including regional large-size landfills.
- to construct and structure for collection, elimination, recycling, post-selection, and composing of waste.
- emergency landfill for elimination of biological and other waste in time of natural disasters, malfunctions, epidemics, etc. at least in one site of the Kraj

# (9) Protection and creation of environment

- to support step-by step realisation of national programmes directed to decreasing the emissions of carbon dioxide and other gaseous substances.
- to initiate and motivate more significant implementation of heating media and fuels with lower rate of environmental pollution through control activity and adapting necessary measures especially in transportation, heat and power management.
- special more strict protection of water management systems and their catchments pursuant to the Decree No. 10/1977, which regulates water streams and their catchments and designates the list of significant water management streams.
- special more strict protection (protection zones for all sources of drinking water) pursuant to the Act No. 138/1973 on water.
- to create territorial and technical conditions for construction of necessary capacity of facilities for elimination and liquidation of hazardous waste.
- to reserve space for perspective regional landfills of municipal wastes and capacity for utilisation of re-usable waste.
- to eliminate waste dumps in areas endangering the environment.

### (10) Territorial planning

• in order to carry out public utility work it is possible pursuant to § 108 of Act No. 50/1976 Coll. On territorial planning and building code 'the Building Act) as amended by Act No. 262/1992 Coll. And the finding of Institutional Court of Slovak Republic No. 286/1996 Coll. Lands and structures and rights thereof pertaining, to purchase compulsorily or to limit ownership rights to lands and structures.