Protected areas in terms of water management

According to Annex 1 to the Regulation of the Ministry of Agriculture of the Slovak Republic No. 211/2005 Coll. setting the list of significant water supply streams, the Danube and the Little Danube river are included in the list of significant water supply streams.

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Number of hydrological catchment area</th>
<th>Water flow significant for water management in the section (km)</th>
<th>Border in the section (km)</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
<td>Danube</td>
<td>4-20-01-001</td>
<td>-</td>
<td>1708.02-1850.2 and 1872.7-1880.2</td>
</tr>
<tr>
<td>72</td>
<td>Little Danube</td>
<td>4-20-01-010</td>
<td>all the section</td>
<td>-</td>
</tr>
<tr>
<td>293</td>
<td>Šúrsky channel</td>
<td>4-21-15-005</td>
<td>all the section</td>
<td></td>
</tr>
</tbody>
</table>

The Danube river with its system of branches represents the predominant factor in creation of the supplies and quality of ground water. The Danube gravel alluvia are a significant reservoir of ground water and they represent the biggest accumulation of ground water in Central Europe. The main source of ground water is the infiltrated water of the Danube, while the greatest sources of drinking water are located in the alluvial zone of the river. For the above reason, this territory is protected by law and it entire belongs to the significant water supply area of PWA (protected water area) Žitný ostrov. Protected water management area of Žitný ostrov has an area of nearly 1,400 km², however, it represents only about 20% of the total area (about 7,000 km²) of all PWMA in Slovakia. The biggest sources of drinking water out of the underground water sources in Europe are situated in this territory (17.3 m³, i.e. 17,300 litres per second); this quantity can supply with drinking water (without further processing) 10,100,000 inhabitants at average consumption of 150 l per inhabitant per day.

Well-arranged data on the water supply conditions of the territory can be found in the attached cut-out of water management map of the territory of interest.

7. Fauna and Flora - Qualitative and Quantitative Characteristics, Biotope Characteristics, Protected Rare and Endangered Species and Biotopes, Significant Migration Corridors of Animals

According to the Feasibility and Effectiveness Study for the D4 line, the routes of the assessed variants C and E, lead through three basic types of habitats, which are of decisive importance in creating conditions for the presence of specific species of animals and plants. From the section beginning up to approx. 2.5 km (variant E), or 3 km (variant C), the highway runs through ruderal habitats, mainly intensively cultivated fields. In the following section up to approx. 5.5 km (variant E), or 6 km (variant C), the interested territory consists of a mosaic of water habitats (the Danube and related water surfaces) and forests (alluvial, oak- hornbeam, oak, and oak mixed forests). The remaining part of the highway up to the end of the section runs again mostly through ruderal habitats (intensively cultivated fields mainly), interrupted at 17 km by water habitats (the Small Danube and related water surfaces).

Fauna

Based on division of the territory of Slovakia into zoogeographical regions, the interest area is a part of the zoogeographical province of the Inner Carpathian Lowlands, Pannonian area, South Slovakia district and riparian Danube district. In view of the potential presence of protected species of animals, the most notable is the section between 2.5 km (variant E) or 3 km, and 5.5 km (variant E) or 6 km (variant C).
Research of protected species of invertebrates on the right bank of the Danube between Petržalka and Rusovce was carried out for the State Nature Protection SR (ŠOP) by a research team of the Faculty of Natural Sciences of the Comenius University in Bratislava in 2006. Confirmed occurrence:

- 6 species of darning needles
  - Aeshna isosceles - green-eyed hawker
  - Anax imperator – emperor dragonfly
  - Anax parthenope – lesser emperor
  - Brachytron pratense – hairy dragonfly
  - Epitheca bimaculata – Eurasian baskettail
  - Somatochlora metallica – brilliant emerald

- 2 species of beetles
  - Hydophilus piceus Linnaeus, 1758 – great silver water beetle
  - Hydrophilus atterimus Eschscholtz, 1822 - water beetle

- 3 species of butterflies
  - Lycaena dispar (Haworth, 1803) – large copper
  - Carcharodus alceae (Esper, 1780) – mallow skipper
  - Glaucopsyche alexis (Poda, 1761) – green-underside blue.

In the final report of the research, however, the presence of tens of other protected species of invertebrate is foreseen in the territory, since the inventory/stocktaking was performed only during a part of the growing season (May to August) and in one year (2006).

62 taxons of fish (85% of ichtyofauna of Slovakia) have been determined in the Slovak section of the Danube and the branch system is an important spawning ground. The protected species include:

- Cottus gobio – Bullhead
- Rhodeus sericeus amarus – Amur Bitterling
- Zingel streber – Streber
- Gobio kessleri – Kessler's gudgeon
- Gymnocephalus baloni – Danube ruffe
- Gobio albibipinatus – White-finned gudgeon
- Sabanejewia aurata – Golden spined loach
- Rutilus pigus – Pigo
- Aspius aspius – Asp
- Gymnocephalus schraetser – Schraetzer
- Pelecus cultratus – Sabre Carp
- Zingel zingel – Common zingel

During the stocktaking research of the amphibians and reptiles in the selected area of the alluvial forests of Bratislava, performed by State Nature Protection (ŠOP) SR, (RNDr. Ján Kautman, 2005), the following species have been identified:

- Rana ridibunda – Marsch Frog
- Rana kl. esculenta – Edible Frog
- Rana dalmatina – Agile Frog
- Bombina bombina – European Fire-bellied Toad
- Bufo bufo – Common Toad
- Bufo viridis – Europen Green Toad
- Hyla arborea – European Tree Frog
- Salamandra salamandra – Fire Salamander
- Triturus dobrogicus – Danube crested newt
- Triturus vulgaris – Smooth newts
- Lacerta agilis – Sand lizard
- Anguis fragilis – Slow worm
- Natrix natrix – Grass snake
- Natrix tessellata – Dice snake
- Elaphe longissima – Aesculapian snake
- Coronella austriaca – Smooth snake

An overview of the bird species found in the part of PWA of Dunajské luhy, through which the proposed highway routes shall pass, is contained in the text annexes. (Mgr. Matúš Kudela, PhD.).

Data on bat occurrence (all species of bats are protected) can be found for instance in the research of Bc. Michal Noga, carried out for ŠOP SR in 2005 in three areas of Danubian alluvial forests in the Bratislava region. The final report confirms the presence of 8 species:

- Myotis daubentoni – Daubenton's bat
- Nyctalus noctula – Common noctule
- Pipistrellus pipistrellus – Common pipistrelle
- Pipistrellus nathusii – Nathusius’ pipistrelle
- Pipistrellus pygmaeus – Soprano pipistrelle
- Eptesicus serotinus – Serotine bat
- Myotis mystacinus /Myotis brandtii – Whiskered bat /Brandt’s bat (undistinguished couple)

Along with the protected species of mammals, there is also a notable species of Castor fiber - European beaver, whose population increases and gradually takes over all appropriate locations in the territory of its original occurrence.

Ruderal habitats in the route of the highway also represent space for occurrence of protected species. In terms of consequences of the assessed activity, this area is of lesser importance. To present some examples, here are the results of the monitoring of small mammals in the agrocoenoses of the cadaster of the Rusovce municipality, which was carried out for STate Nature Protection (ŠOP) SR by RNDr. Ján Krištofík, CSc. in 2005. There are 4 protected species, out of 12 registered:

- Sorex araneus Linnaeus, 1758 – Common shrew
- Sorex minutus Linnaeus, 1766 – Eurasian pygmy shrew
- Crocidura leucodon (Hermann, 1780) – Bicoloured shrew
- Cricetus cricetus (Linnaeus, 1758) – European hamster

The nature protection documentation of the given territory also states the occurrence of the following species:

- Putorius eversmanni – Steppe polecat
- Mus spicilegus – Steppe mouse
- Cricetus cricetus – European hamster
- Erinaceus concolor – Southern white-brested hedgehog
We also enclose the results of the avifauna monitoring of the agrocoenoses of the east edge of Bratislava, performed by Mgr. Matuš Kudela, PhD in 2008. (Text Annexes)

The most significant migration corridor of animals, crossed by the proposed highway route, is a corridor in the area of the Danube river. It ensures migration for all animal species, nevertheless, in particular for fish and birds (spring and autumn migration), for which it constitutes a corridor of international importance. Less significant corridor for migration of animals in the highway route is the area of the Small Danube. Migration of animals at local level takes place naturally in many places of the corridor of planned transport communication. With respect to its location on the interface of urbanised (or intended for urbanisation) territory and mostly agricultural landscape, it can be anticipated that migration of animals, for which the highway might represent a barrier, will not be significant in the future.

In terms of hunting management of the affected territory it can be stated that the highway will be passing mainly through the hunting districts of Jarovce, the Danube, Podunajské Biskupice, the Small Danube and Ivanka pri Dunaji. The main game is roe, rabbit and pheasant or boar and duck.

Flora

According to the phytogeographical division of Slovakia, the flora of the assessed territory belongs to the area of Pannonian flora (Pannonicum), Eupannonian xerothermic flora circuit (Eupannonicum), and to the district of the Podunajská nížina Lowland.

From the viewpoint of potential natural vegetation (ÚEBE, CBEV SAV, 1983), the routes of both variants cross, on the right bank of the Danube, mostly willow and poplar alluvial forests; the route of variant E crosses these only on the left bank almost until the Ketelec interchange. Subsequently, approximately until the Rovinka interchange, the route crosses a territory of ash-elm-oak lowland forests. The route of variant C, after crossing the Danube, continues for a short time through willow and poplar alluvial forests, then for a similarly short section through Pontian and Pannonian oak forests (hawthorn bushes), and then, similarly to variant E, through ash-elm-oak lowland forests. From the Rovinka interchange, the highway has a single route approximately until Most pri Bratislave, crossing a territory of Pontian - Pannonian oak forests (Jordan Pannonian forests) and then through ash-elm-oak lowland forests interrupted by willow and poplar alluvial forests alongside the Little Danube.

Real vegetation is significantly modified in the majority of sections of proposed highway routes. Its character is strongly influenced by human activity.

For more information on the vegetation of ruderal habitats in the route of the highways on both banks of the Danube, the results of botanical research of the agrocoenoses of the initial part of the highway, carried out for ŠOP SR in 2005 are stated in the text annexes.

The vegetation of the Danube inundation territory situated in areas crossed by the highway routes, is formed by various succession stages of alluvial forest, given that the territory was significantly impacted by the preparation works for the Gabčíkovo Water Works construction in the 1980s. At that time, the alluvial forests were excluded from the FLU and mostly removed, since the original intentions were to create an area with changing water level in the dam. Over the last 20 years, the territory has been subject to a disorganised and spontaneous development. The alluvial lands' ability to regenerate naturally has been evident, on the other hand the area is heavily impacted by a non-regulated recreational use (housebots and related traffic infrastructure).

Over the left-bank dam on the Danube, both variants of the highway cross the forest lands in the FLU for approximately 1 km. According to forest typology, following forest types are present in the given area:
- 951 Damp elm and ash stand with common hornbeam
- 952 Common nettle and elm stand with common hornbeam
- 953 Garlic and elm stand with common hornbeam
- 954 Dry elm and ash stand with common hornbeam
- 1603 Dogwood oak wood with common hornbeam

Along with the species typical for the given forest types, there are also non-native habitat species in the current wood species structure, such as *Fraxinus americana*, *Populus x euroamericana*, *Juglans nigra*), even invasive (*Negundo aceroides*, *Ailantus altissima*, *Robinia pseudoacacia*).

There is no data available on the occurrence of protected plant species directly in the way of proposed highway routes. A detailed botanical research was not carried out, due to the season (winter, early spring) in which the territory research was performed. It is necessary to verify the data on the occurrence of protected species with a subsequent research in the next stage of project documentation, and in the initial phase of the monitoring (before the construction) within a precisely selected route of the preferred variant.

### Habitats

The habitat identification in the corridors of the highway variants focused on the habitats of European as well as national importance in view of the regulation of the Ministry of Environment of the Slovak Republic No. 24/2003 Coll. implementing the Act no.543/2002 Coll. on nature and landscape protection, as amended. Provided that an overall habitat mapping in the given territory has not been performed so far, we relied on the actual territory research of the highway corridors, and also on the information from Forest Management Policy (LHP) on forest stands. We have taken inspiration from the methodology of habitat mapping of the Catalogue of Habitats in Slovakia (DAPHNE, 2002), and the mapping methodology of forest habitats (NLC, 2009) in case of forest stands. With regard to the season of the year of the territory research (winter, early spring), only the habitats which could be identified in that time period are described. The mapping would necessitate further research in the growing season. The results of the inventory and research of the habitats are expressed also graphically in the text annexes.

There are habitats of European importance identified in the corridor of the variant C, at 4.8 to 5.6 km. In this area, there are forest stands in a temporary natural condition on the forest land of the dry elm and ash stand with common hornbeam type. According to the Methodology of mapping of forest habitats (NLC, 2009), considering their location in the forest sub-region 02 A - Podunajská rovina and their mostly original representation of domestic poplar trees, they belong to the habitat 91E0 Mixed ash-alder alluvial forest of temperate and Boreal Europe (*Alno-Padion, Alnion incanae, Salicion albae*), that is a habitat of primary European importance. The characteristics and danger to this habitat in general are stated in the text annexes. The forest habitats No. 252, 253, 243a, and 254a in the LHC Rusovce, which are directly traversed by the highway route, have been included into the said habitat. The stand No. 245b in the LHC Rusovce, located in the highway corridor between 5.2 km and 5.6 km, has been classified as the habitat 91F0 Riparian mixed forests of *Quercus robur, Ulmus leavis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along great river of the Atlantic and Middle European provinces (*Ulmenion minoris*), that is a habitat of European importance.

The habitat of primary European importance 91E0 Mixed ash-alder alluvial forest of temperate and Boreal Europe (*Alno-Padion, Alnion incanae, Salicion albae*) is situated also on the right bank of the Danube river, around km 4.0., that is in the way of the highway route of the variant C. This habitat is located also in the Nature Reserve of Dunajské ostrovy, in close proximity of the variant C.
The habitat of primary European importance 91E0 Mixed ash-alder alluvial forest of temperate and Boreal Europe (Alno-Padion, Alnion incanae, Salicion albae) in the area of 3.3 km to 4.3 km is located in the way of the highway route of the variant E.

8. The Landscape - the Structure of the Landscape, Landscape Image, Scenery, Stability, Protection

The structure of landscape is the result of a long-term historical development. It reflects the exploitation of the natural landscape by people. It originates as a result of human impact on natural ecosystems, by their exploitation, visible in the modification and influence on the properties of the landscape components.

The structure of the landscape of the territory involved results from its functional orientation. The territory of interest is represented by a typical lowland agricultural landscape with the concentrated village settlements of Most pri Bratislave, Zálesie and Ivanka pri Dunaji, positionally related to heavily urbanised municipal landscape represented by the city of Bratislava and its municipal parts of Jarovce, Rusovce, Podunajské Biskupice and Vajnory.

The landscape in the proximity of the Danube River has a totally different character, the dominant position belongs to the course itself, its branches and alluvial forests. The exploitation of the territory is significantly different, where use or recreation prevails.

Within the assessed territory, we may earmarked the following basic elements of landscape structure:

- **Inundated forests** – the occurrence of forests is concentrated to the proximity of the Danube River and its branches. The forests are concentrated mostly alongside the Danube, the most in its inundation territory. The majority of forest stands is part of the PLA Dunajské luhy.

- **Landscape vegetation** - has the character of scattered greenery within the agricultural countryside – game refuges, groves, shelter belts, accompanying vegetation alongside communications, etc. Its representation in the intensively agriculturally exploited landscape is very low. The most significant locations of landscape vegetation may be considered to be the following:
  - The vegetation of baulks – it is formed by Black Locust, European Ash, Cherry, Field Maple, Dog Rose, etc.
  - The line vegetation alongside the communications – it is the non-forest tree or bush vegetation, often not connected, creating mostly the accompanying edge of transport communications with the following representation of species: Field Maple, European Ash, Small-leaved Lime, Cherry, White Willow, the understorey is formed by natural regeneration of Black Elder and Dog Rose.

- **The permanent grassland (TTP)** - are represented by hayfields and pastures, located at the outskirts of branches and in terrain depressions. This vegetation is represented by the alliance of Rorippo sylvestris -Agrostietum Stoloniferate. Also a part of the agricultural land is used as the permanent grassland (TTP), however their representation is very low and therefore the grassland is bound in particular to the area of the PLA Dunajské luhy.

- **Water courses and areas** - the most important element of the territory is the Danube river with its branches and system of channels built within the Gabčíkovo WD. Other water courses (the Small Danube, Šúrsky channel) and water surfaces form a significant
landscape element in the agricultural country. Some of them are part of protected areas, or recreational areas, allotted gardens and cottage areas

- **Arable land** – is spatially the vastest element of the landscape structure of the territory of interest. The development of agriculture in the territory depends on very favourable natural conditions - it is an area of very fertile soils with favourable climatic conditions.

- **From amongst the permanent cultivations**, the biggest representation belongs to gardens and orchards:
  - **Orchards** – these are large-area, mostly intensively used lands, focused on the production of fruit
  - **Gardens and allotted gardens** – the gardens have the character of gardens located near houses, the allotted gardens, recreation gardens, etc.

- **Built-up areas and other areas**, according to their characteristics they may be divided into various groups:
  - **Residential areas** – the individual residential development and residential houses are the most significant structural unit of the village residential zone
  - **Civil facilities areas** – they are represented by the facilities for the satisfaction of the settlement needs of population
  - **Sport-recreational objects, refreshment objects along cycling paths, allotted gardens areas**
  - **Floating recreational houses (hausbots) are of significant presence** - situated on the Jarovce branch
  - **Large-area industrial areas** – they represent large production companies (Slovnaft)
  - **Other industrial areas** - they have just local representation in the territory within the business activities (Strabag, Ferona, Stachema) and small manufactures
  - **Water management objects** - represented by protective anti-flood dams and regulation objects
  - **Power objects** – they are represented by the distribution centres of electric network
  - **Agricultural areas** – they are mainly represented by the individual yards of the agricultural companies
  - **Equipment and areas of the airport of M.R. Štefánik** - take-off and landing runways, radio beacons, etc.
  - **Objects of MO SR**

- **Existing gravel mining and processing areas**
- **Objects of hunting associations and gamekeeper’s lodges**
- **Sacral objects, cemeteries, memorial monuments** - M. R. Štefánik Memorial
- **Line transport elements** – they may be divided to the following elements:
  - **Roads** - the planned road communication shall be connected to the highways D1 and D2. In the area, there are also primary, secondary and tertiary roads, namely the roads I/2, I/63, I/61, II/572, and III/06359, local roads and a net of field and service roads.
railway routes - the territory is crossed by the railways No. 132 Bratislava - Rusovce, No. 131 Bratislava - Dunajská Streda, No. 130 Bratislava - Galanta and the railway siding of Slovnaft

Waterway – leading through the main course of the Danube River

tourist and cycling routes - the Danube cycling route passing along both sides of the Danube on the anti-flood embankments

- Line elements – electric lines and stations – there are distribution stations in the territory having the connection to the areal line of 400/100kV and 22 kV.

- Line elements – product ducts – the routes of gas pipeline, oil pipeline, water supply system, cable lines are in the territory, in majority of cases buried under ground.

From the point of view of geo-ecological natural landscape types, the entire monitored territory is characterised as intramontane lowland landscape of moderate zone, as a flatland accumulation landscape with pore ground water. The territory represents a fluvial flatland with hydromorphic soils and hydrophilic to water vegetation where aggradation embankments and floodplains and inundated soils with inundated forests dominate, old aggradation dams with mycelar-carbonate chernozems and forest steppe have smaller representation.

From the point of view of the types of contemporary landscape, the vast majority of the territory belongs to the agricultural lowland flatland ploughed landscape with countryside settlements. From the West, industrial and technology-comprising lowland landscape of urban type reaches there. The most valued type of landscape from the point of view of natural values is represented by the landscape around the Danube stream that is characterised as forest unsettled to sporadically settled lowland landscape with primary composition of wood species.

In terms of country scenery in the monitored territory, the urbanised and agriculture land, as well as the Dunajské luhy area can be identified.

Urbanised area - the most important urbanised landscape area is the agglomerate of Bratislava, the capital of Slovakia. The municipalities of Rovinka, Most pri Bratislave, Zálesie, Ivanka pri Dunaji, and Chorvátsky Grob form a regional development pole of Bratislava in relation to the neighbouring city districts of Bratislava, while all the types of settlement structure are present, ranging from residential and multi-functional zones with resident facilities, to large-area and small-area industrial and agricultural sites, etc.

Agricultural landscape – intensively cultivated agricultural countryside with flatland relief and the absence of attractive landscape aesthetic elements composes the concerned territory. The typical landscape consists of large-block fields and permanent crops, interrupted by the water flows of the Danube, the Small Danube, the Šúrsky channel, alluvial forests, water surfaces of gravel pits, line elements and airport areas.

The territory of interest represents the landscape with low perception value since it is a monotonous agricultural landscape with large-block structure of land resources, characterised with large plots of arable land with low spacial ecological stability. The low aesthetic quality of landscape structure is conditioned in particular by little attraction and diversity of the places with monotonous agricultural scenery with central built-up area that has been recently intensively expanded in particular to the North part of the territory where it changes the original use of the territory for agricultural production to the zone for living an making business.

The positive supporting elements of landscape scenery in the concerned territory and its hinterland can be considered to be, above all, the inundate forests in the inundation area of the Danube River, then the grassland along the Small Danube and Šúrsky channel, which are the part of the
large-area and small-area protected territory and TSES elements, the elements of tree lines alongside roads, refuges and little forests in agricultural countryside.

The landscape of Dunajské luhy – is the attractive natural and semi-natural elements of the countryside typical for lowland, represented by the course of the Danube River and its branches, its littoral zones with, wetland and inundated forests.

In terms of stability, the territory of interest represents the landscape with low perception value since it is a monotonous agricultural landscape with large-block structure of land resources, characterised with large plots of arable land with low spacial ecological stability. The low aesthetic quality of landscape structure is conditioned in particular by little attraction and diversity of the places with monotonous agricultural scenery with central built-up area that has been recently intensively expanded in particular to the North part of the territory where it changes the original use of the territory for agricultural production to the zone for living an making business.

In addition to the protected areas under the Act of the National Council of the Slovak Republic No. 543/2002 Coll. on nature and landscape protection, there are territories with legislative protection of other natural resources in the monitored territory. The protected zones include the function zones determined by law for the purposes of the protection of natural sources - water, forest, soil, etc. The following zones are earmarked in the territory:

- Protected water supply territory (PWA) Žitný ostrov – the area is important from the point of view of the occurrence of ground water used for supplying the inhabitants with drinking water. Therefore all the activities carried out in the territory should be in accord with the protection of this area of natural accumulation of water.

- Special-purpose forests – in the monitored territory they represent mostly the remnants of inundated forests in the proximity of the Danube River that are the part of the PLA Dunajské luhy, many of them form the part of small-area protected territories or are bound to the locations of the proposed protected territories and the locations of the TSES elements. In particular, they are the forests within the Danube inundated forests with high eco-stabilisation and ecological significance, with a notable occurrence of rare and endangered species. For this reason, the majority of forests in the territory of interest has the statute of protective forests. The protective forests require a special regime of management, that dominantly ensure the fulfilment of their protective function. They act as the legislative limits of the social and economical development. Their limiting effect is in particular from spacial aspect - the bank of tree cutting or negative endangerment due to the implementation of social and economical activity stressing the environment with secondary stressing factors.

- zone of hygienic protection of water source of 1st grade Podunajské Biskupice - was constructed in the 60-s under the name "2nd water source". The water source was commissioned in March 1966, however in July 1972 it was completely decommissioned. This was due to pollution of the subsurface waters by the Slovnaft refinery. The area of the water source includes a water reservoir with a capacity of 20 000 m³ and a pumping station with the capacity of 1600 l/s. From the pumping station, water is transported by DN 1200 and DN 800 mm pipelines to the consumption points and to water reservoirs of the 1st pressure zone. The water source limits and restricts the development of activities even when unused, it is a local biocentre at present.

- zone of hygienic protection of water source of 2nd grade Rusovce - is located north of the built-up area of the village, water is transferred through the consumption area into the
tower-like water tank with the volume of 200 m³, to this tap water system urban areas Rusovce and Jarovce are connected.

- **zone of hygienic protection of water source of 2nd grade Rusovce-Wetland-Ostrovne Lúčky (VZ ROL)** – one of the most significant water sources of Bratislava, from which as much as 1 600l/s is used, in 2007 the zone of hygienic protection was updated by decision of the District Authority of Environment in BA, Department of state water administration No. ZPS 1040/2007-GGL-1 of 9 June 2007 and after its amendment the route of D4 does not interfere in the new borders of the hygienic protection zone 2

- **zone of hygienic protection of water source of the 2nd grade of Ivanka pri Dunaji** - is out of reach of D4

- **protected zone of the sources of natural healing water of 2nd grade of Čilistov** - is out of reach of D4

- **The best-quality soils** – the territory of interest belongs to the areas with the best-quality soils from the national point of view, which predetermines them for the use for agricultural purposes.

Within the landscape protection, it is necessary to state the protection of the cultural and historical monuments located in the concerned territory. This is the original anti-flood protective dam (built in the period of the Austria-Hungary, under the rule of Maria Theresa) as the part of secondary anti-flood line (Hornožitnoostrovná dam), from Podunajské Biskupice towards Hamuliakovo. After putting the waterworks of Gabčíkovo into operation in 1992, this embankment has become non-functioning and its function was taken over by the left-side embankment of Hrušov pool. The given section of the original embankment was declared by the Ministry of Culture of the Slovak Republic to be the protected cultural and technical monument (the Resolution of the Ministry of Culture – 954-3 of 22 September1994).
Another protection group consists of protected zones of the social and economical elements (the technical objects and lines - communications, railway, product ducts, oil pipelines, electric lines, etc.) Their objective is the protection of the surrounding environment against their unfavourable impacts, as well as the safe protection of objects. In addition to the stated areas, there are also the gravel mining areas that are provided for by law as well.

The protected area of the M. R. Štefánik Airport consisting of a few protected areas, secured by law and respected by the D4 highway routing (see technical solution) may be mentioned separately.

9. The Protected Territory pursuant to the Regulations and their Protected Zones

The substantial portion of the monitored territory is located in the Podunajsko area that is significant from the point of view of forest, gene pool and water resources. There are the remnants of inundated forests of the Central European importance there, to which notable gene pool resources of both flora and fauna are bound. The locations of protected territories are bound to inundated forests located in the vicinity of the Danube river. On the highway D4 route there are multiple protected areas under the Act of the National Council of the Slovak Republic No. 543/2002 Coll. on nature and landscape protection. The text annexes describe the situation of such relations.

PLA Dunajské luhy

The selected sections of the Danube river with adjacent flood plains have assured protection by the declaration of the territory to be the Protected Landscape Area (CHKO) by the Regulation of the Ministry of Environment of the Slovak Republic No. 81/1998 Z.z. on the Protected Landscape Area Dunajské luhy of 3 March 1998 with the effect as of 1 May 1998. The territory of the Protected Landscape Area represents a unique natural environment under the Central-European conditions with its vast system of river branches. From the point of view of nature protection, out of 172 km log Slovak section of the Danube, the most valuable is 80 km long section from Bratislava up to Zlatná na Ostrove with a developed branch system, extensive complexes of inundated forests and alluvial meadows. Biskupické luhy, the independent first part of the PLA, are directly traversed by the highway routes in variants C and E. They are characteristic with stands of hardwood inundated forests and in particular specific communities of xerothermic biotopes of the Danube forest steppe/Danube hawthorn growth (Asparago- Crataegetum). This variety of natural conditions is demonstrated in the plentiful representation of plant and animal species, out of which many are rare and endangered. Second grade of protection pursuant to the Act of the National Council of the Slovak Republic N. 543/2002 Coll. on nature and landscape protection is valid in the PLA Dunajské luhy.

Nature Reserve Dunajské ostrovy

The reserve was declared by the generally binding regulation of the Bratislava Regional Authority no.7/2002 of 8 November, 2002, and by the regulation of the Bratislava Regional Environment Office in Bratislava no. 4/2007 of 14 November, 2007. The purpose of the Nature Reserve foundation is to secure protection of natural processes and unlimited development of the vegetal and animal communities, habitats of European importance of willow-poplar lowland alluvial forests and oak-elk-ash lowland forests as typical characteristics of the alluvial land The reserve covers an area of 219,71 ha. In the territory applies the 5th level of protection pursuant to the Act of the National Council of the Slovak Republic No. 543/2002 Coll. on nature and landscape protection. The highway routes do not run across the reserve. The variant C moves closest to the area at 3.1 km at a distance of approx.100 m.
NR Gajc

The present-day area of 62.72 ha of the reserve was declared by the regulation of the Bratislava Regional Environment Office in Bratislava no. 4/2005 of 13 September, 2005, effective from 1 October, 2005. The purpose of the declaration of natural reserve is the assurance of the protection of the habitat of the steppe vegetation directly bordering with inundated forest. The 4th grade of protection pursuant to the Act of the National Council of the Slovak Republic N. 543/2002 Coll. on nature and landscape protection is valid in the reserve. The variant C runs directly across the centre of this "small-area" protected territory, which makes us devote more attention to the characteristics of its present condition.

The territory is situated behind the Danube dam and seepage channel, so it is out of reach of the regular inundations, although it is influenced by the changing level of the under-surface water. Dry elm and ash forest stand with common hornbeam with added garlic, elm and ash stand with common hornbeam in higher places. The vegetation is mostly old, multi-level, interrupted with well-developed layer of shrubs. Among the species typical for the given forest prevail Quercus robur (English oak), Fraxinus excelsior (European Ash), Quercus cerris (Austrian oak), Populus alba (White poplar), intermixed with Robinia pseudoacacia (Black locust), Juglans nigra (Eastern blanck walnut). On elevated gravel substratum, in between the forest communities, there are grass-herb-shrub enclaves of the community of Crataegetum danubiale with the occurrence of bushes of Crataegus monogyna (Common hawthorn), Ligustrum vulgare (Common privet), Ulmus minor (Field elm). A wetland habitat is part of the area. It is a remnant of an oxbow lake in an advanced deposition stage. Protected plant species identified in the area:

- Orchis coriophora – Spotted orchis,
- Orchis militaris - Soldier orchis

Other noteworthy endangered, vulnerable and rare species include: Lycopodioides helveticum, Thesium ramosum, Centaurium erytraea (European centaury), Orobanche minor (Common broomrape), Hippochaete hyemalis (Scouring rush), Thalictrum flavum (Yellow meadow rue), Quercus pedunculiflora (English oak).

The territory also represents an important refuge to many species of protected animals. The list of detected taxons is to be found in the text annexes.

NR Kopáčsky ostrov

The area was declared a natural reserve by the Inactment of the Ministry of Culture of the Slovak Socialist Republic No.7439/1976-OP from 30 October, 1976, effective from 1 November 1976. The objective of the declaration of natural reserve is to assure protection of the mosaic of specific steppe and forest-steppe communities and instances of forest communities of alluvial forests, as well as to serve science and research, educational and cultural-educational purposes. The reserve covers an area of 82.62 ha. In the territory applies the 5th level of protection pursuant to the Act of the National Council of the Slovak Republic No. 543/2002 Coll. on nature and landscape protection. The highway route does not run across the reserve. The site will be impacted mostly by the noise of the routing of the highway according to the variant E.

NR Topoľové hony

The natural reserve Topoľové hony is also situated out of reach of direct highway routes, although it is impacted by the noise pollution of the variant C. It is a 60.06 ha territory declared by the Decree of the Ministry of Culture of SSR No. 1160/1988-32 of 30 June, 1988 (effective from 1 September 1988) for the protection of xerothermic Pannonian oak stands and plant communities
with European Bladdernut (Staphylea pinnata). The second grade of protection pursuant to the Act of the National Council of the Slovak Republic N. 543/2002 Coll. on nature and landscape protection is applied in the area.

Ramsar site Dunajské luhy

The reason for the registration of Dunajské luhy amongst the internationally important wetlands was the existence of the system of river branches and oxbow lakes in the Slovak-Hungarian section of the Danube that belongs to the greatest inland deltas in Central Europe and is the representative and rare example of natural and nature-close type of wetland in the Pannonian area. It was recorded in the list of wetlands with international importance on 26 May, 1993 and its total area between Bratislava and Zlatná na Ostrove is 14,488 ha. The variants C and E directly cross the said ramsar location.

In territorial protection in the NATURA 2000 system, the following territories of European importance (SKUEV) and protected bird territories (SKCHVU) are located in the route of the D4 highway.

The territory of the European importance SKUEV0295 Biskupické luhy

The territory belonging to the system due to habitat protection of European importance of the xerophilic Pannonian Oak forests (91H0), the Carpathian and Pannonian Aok and Hornbeam forests (91G0), Inundated Oak-Elm and Ash forests (91F0) and the species of the European importance: Great Capricorn Beetle (Cerambyx cerdo), Stag Beetle (Lucanus cervus), Dioszeghyana schmidtii, White-finned Gudgeon (Cottus gobio), Danube Ruffe (Gymnocephalus baloni), Kessler's Gudgeon (Gobio kessleri), European Fire-bellied Toad (Bombina bombina) and Eurasian Beaver (Castor fiber). Area of the location is 869.03 ha. Both variants of the highway cross the territory of European importance SKUEV0295 Biskupické luhy.

The territory of the European importance SKUEV0269 Ostrovné lúčky

The territory listed in the system with the purpose of protection of habitats European importance of Alluvial oak-elm-ash forests along lowland rivers (91F0), Alluvial willow-poplar and alder forests (91F0), Xerophilous grass and herb bushy stands on lime subsoil (6210), Natural eutrophic and mesotrophic dead waters with vegetation of floating and/or immersed vascular plants of Magnopotamion or Hydrocharition (3150) and species of European importance Great Capricorn Beetle (Cerambyx cerdo), Cucujus cinnaberinus (Cucujus cinnaberinus), Stag Beetle (Lucanus cervus), Large white-face darter (Leucorrhinia pectoralis), White-finned Gudgeon (Cottus gobio), Streber (Zingel streber), Danube Ruffe (Gymnocephalus baloni), Tubenose goby (Proterorhinus marmoratus), European bitterling (Rhodeus sericeus amarus), Kessler's Gudgeon (Gobio kessleri), White-finned gudgeon (Gobio albipinnatus), European Fire-bellied Toad (Bombina bombina), Danube newt (Triturus dobrogicus), European beaver (Castor fiber), and Greater mouse-eared bat (Myotis myotis). The area of the location covers 613.56 ha. The proposed highway route does not run across the territory of European important of SKUEV0269 Ostrovné lúčky. However, the area is situated within the variant C corridor.

The protected avian territory SKCHVU029 Sysľovské polia

Sysľovské polia is one of the three most significant territories in Slovakia for nesting of species Great bustard (Otis tarda) and Red-footed falcon (Falco vespertinus). More than 1% of Central European populations of geese (Anser sp.) regularly spend winter in the territory. The area of the location is 1 773 ha. The highway does not run across the area, yet it is in contact with the beginning part of the assessed segment.
The protected avian territory SKCHVU007 Dunajské luhy

Dunajské luhy is one of the three most significant territories in Slovakia for nesting of the following species: White-tailed Eagle (*Haliaeetus albicilla*), Little Egret (*Egretta garzetta*), Black Kite (*Milvus migrans*), Little Bittern (*Ixobrychus minutus*), Mediterranean Gull (*Larus melanocephalus*), Common Tern (*Sterna hirundo*), Kingfisher (*Alcedo atthis*) and one of five territories for testing of the following species: Garganey (*Anas querquedula*), Common Redshank (*Tringa totanus*), Red-crested Pochard (*Netta rufina*) and Gadwall (*Anas strepera*). More than 1% of the European migratory population of the species: Smew (*Mergus albellus*), Tufted Duck (*Aythya fuligula*), Common Pochard (*Aythya ferina*) and Common Goldeneye (*Bucephala clangula*) regularly winters in the territory or migrates. The territory supports during migration more than 20,000 and during wintering more than 70,000 individuals of several water bird species. Furthermore, more than 1% of the national population of the species: Tawny Pipit (*Anthus campestris*), Black Stork (*Ciconia nigra*), Marsh Harriers (*Circus aeruginosus*) and Sand Martin (*Ripa ripparia*) regularly nests in the territory. Area of the location is 16511,58 ha. Both of proposed variants cross the PLA Dunajské luhy.

In addition to the protected areas under the Act of the National Council of the Slovak Republic No. 543/2002 Coll. on nature and landscape protection, there are territories with legislative protection of other natural resources in the monitored territory. Their overview is given in part A of the Report.

10. Territorial system of ecological stability

Within the corridors of the assessed variants of the highway D4, there are several elements of territorial system of ecological stability (TSES), of regional and supra-regional importance, and the route pass directly through some of the elements. The text annexes describe the situation of such relations. The identification and characterisation of the TSES elements was performed in view of the Regional TSES of the Bratislava city (SAŽP, 1994), and Update of Bratislava Regional TSES elements (SAŽP, 1994), and Regional TSES of the district of Bratislava-countryside district (SK, 1993).

A bio-centre is an ecosystem or ecosystem group that creates permanent conditions for reproduction, hiding and feeding of live organisms and for the preservation and natural development of their communities. From the point of view of hierarchy and importance, there are the bio-centres of supra-regional, regional and local importance in the monitored territory.

Supraregional bio-centre (NRBc) Bratislavské luhy

It represents a complex of preserved inundated forests on both banks of the Danube. The area of this biocentre was permanently reduced by ca 5,000 ha of forest stands due to the construction of waterworks Gabčíkovo. The contemporary area of the bio-centre and high level of its impairment do not provide the conditions for permanent survival of several species that occurred there in past (e.g. Deer, Beaver, Otter, Badger, White-tailed Eagle, etc.). In order to ensure the function of the supra-regional bio-centre, its revitalisation and extension by the missing area to the detriment of arable land shall be necessary. Both assessed variants cross the given bio-centre as well as the territories on both banks of the Danube which were proposed to extend this particular element of TSES.

The bio-corridors may be characterised as spatially interconnected set of ecosystems that connects the biocentres and allows the migration and exchange of genetic information of live organisms and their communities, spatially followed by interaction elements. From the point of view of hierarchy and importance, there are the bio-corridors of provincial, supra-regional, regional and
local importance in the monitored territory. The most significant migration corridor in the territory of interest is the Danube River that together with its branches and surrounding riparian forests belongs to the system of intercontinental bio-corridors through which in particular birds migrate from their wintering places in Africa and on the shores of the Mediterranean Sea. It is also an international corridor for fish migration, that however is of not so great importance as in past for the reason of the deterioration of quality of water in the river and the construction of waterworks. It plays its role also in the migration of other animal species, either aquatic or terrestrial. These facts sort the territories alongside the Danube River course in the category of provincial bi-corridors with international importance.

**Provincial bio-corridor Danube**

The corridor is interrupted two times in the area of Bratislava, in the area of the Hrušov embankment and in the area of the city itself. It is necessary to restore its functionality by extending the supraregional biocenter of Bratislava’s floodplains and creating a new “bypass” around Bratislava from the SW side (a new provincial biocorridor). The proposed highway crosses the bio-corridor in the premises of a supraregional bio-centre Bratislavské luhy.

**Supraregional biocorridor Small Danube.**

At present its functionality is severely disrupted by the watercourse control in the territory of the city, and by felling of the riparian vegetation and systematic pollution. Revitalisation of the entire damaged section is inevitable. It is also necessary to solve a functional connection of the Little Danube and the Danube bio-corridors in the Vlčie hrdlo area. The route of the highway crosses the bio-corridor approximately in km 16.8.

**Regional bio-corridor Bratislavské luhy - Bažantnica**

The main purpose of the proposal of creation of a bio-corridor is to link the southern vegetation from the Jarovské arm to the bio-centre Bažantnica, subsequently eliminating its isolation. It is expected that the creation of the route of the bio-corridor will be made by planting bushes and verdures in the route of the depression of an original meander of an old arm, connecting to the existing residual verdure. The creation of the proposed biocorridor will be important especially to order to increase the stability of biodiversity as well as the functionality of exchange of genetic information in the regional bio-centre Bažantnica. The highway route collides with the originally proposed direction of the given bio-corridor, therefore a new routing was proposed within the Update of the RTSES elements of the Bratislava municipality (SAŽP, 2005).

During the territorial research of the highway route, to the above mentioned TSES elements of provincial, supra-regional and regional importance were added important land elements functioning as TSES elements on the local level (mainly interaction elements). These are forests covering the section from 19.1 to 19.3 km and the area of the Ivanka - West interchange (text annexes).

**Gene pool locations (GL)**

The locations important as gene pools are represented by the countryside areas with nowadays recorded species important from the gene pool standpoint (the protected species and species entered into red books). Flora and fauna is the riches on these locations in the monitored territory, that was still preserved in the environment with very heavy anthropic pressure. The most significant gene pool locations are located alongside the Danube river stream. These areas create the suitable preconditions not only for an abundant occurrence of flora and fauna species, but also
for the migration of biota to the entire surrounding area. As a matter of fact, they are identical with the other preserved locations.

11. Population

Demographic Data

The proposed activity directly involves Bratislava, the capital of Slovakia, and its districts of Jarovce, Rusovce, Podunajské Biskupice, Vajnory, as well as the municipalities of Most pri Bratislave, Zálesie, and Ivanka pri Dunaji.

Bratislava is an autonomous administrative centre covering an area of almost 370 km². Bratislava is backed by the Bratislava Self-Governing Region counting further 170 thousand inhabitants. The population of Bratislava currently represents approximately 425,000 resident citizens of the Slovak Republic. Since the 2001 national census, the number of inhabitants has decreased by 0.8% (approximately 3,500 inhabitants) over the last three years. The reproduction tendency to decrease has been confirmed by the development of the population growth rate. The transformation of demographic behaviour under new social and economic circumstances has been continuing. The previous patterns of nuptiality, natality and fertility of women have been gradually abandoned, and the reproduction characteristics have reached the average level of the Western European countries. Considering the inhabitants daily present in town, Bratislava is an important target of commute for work, school, etc. It is an administrative, organisational, economic and transit city of the Slovak Republic. It is an important centre of both domestic and foreign tourism.

In terms of territorial administration of Slovakia, the towns of Most pri Bratislave, Zálesie and Ivanka pri Dunaji are situated in the district of Senec, which belongs to the Bratislava Self-Governing Region. The population development of both cities is characterised by various developmental waves, both progressive and regressive. It has been influenced by the administrative, political and social situation, by investment activities in residential construction and financial policies of the state as well as the city of Bratislava in relation to the municipality. The dynamic development of the suburban area of Bratislava has recently increased the requirements concerning the territorial development of towns in proximity of the urban agglomerate as well as the housing and business demands, which has impacted the demography of the municipalities involved. The following table includes basic data related to permanent residents according to municipalities:

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Permanent residents</th>
<th>Permanent residents - female (in %)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>total</td>
<td>male</td>
</tr>
<tr>
<td>Bratislava</td>
<td>428672</td>
<td>200541</td>
</tr>
<tr>
<td>Jarovce</td>
<td>1199</td>
<td>575</td>
</tr>
<tr>
<td>Rusovce</td>
<td>1922</td>
<td>958</td>
</tr>
<tr>
<td>Podunajské Biskupice</td>
<td>19749</td>
<td>9,403</td>
</tr>
<tr>
<td>Vajnory</td>
<td>3,828</td>
<td>1899</td>
</tr>
<tr>
<td>Most pri Bratislave</td>
<td>1,555</td>
<td>770</td>
</tr>
<tr>
<td>Zálesie</td>
<td>750</td>
<td>365</td>
</tr>
<tr>
<td>Ivanka pri Dunaji</td>
<td>4,989</td>
<td>2,414</td>
</tr>
</tbody>
</table>

Source: Slovak National Census 2001, SSU, 2001

The next table shows the basic data on present and economically active population listed according to municipalities:

<table>
<thead>
<tr>
<th>District/Municipality</th>
<th>Present population</th>
<th>Economically active population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Since the second half of the 1990s, major changes have occurred in the demographic development of Bratislava and surroundings, which reflect the current socio-economic situation. A major decrease of nuptiality and fertility, continuous slight increase in the number of divorces, unsatisfactory level of mortality in spite of the improvement of healthcare, changes occurring in development of the abortion rate, as well as migration all contribute to the decrease of natural increment of population, thus to its aging.

The latest available information on number of inhabitants of individual municipalities:

- Municipal District Jarovce 1 227 inhabitants (2005)
- Municipal District Rusovce 1 922 inhabitants (2005)
- Municipal District Podunajské Biskupice 19 749 inhabitants (2005)
- Municipal District Vajnory 4 200 inhabitants (2005)
- Most pri Bratislave 1 540 inhabitants (2006)
- Zálesie 1 120 inhabitants (2007)
- Ivanka pri Dunaji 5 500 inhabitants (2006)

Basic data on permanent residents according to age group and municipality, based on the National Census 2001 are as follows:

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Bratislava</th>
<th>Jarovce</th>
<th>Rusovce</th>
<th>Podunajské Biskupice</th>
<th>Vajnory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>428672</td>
<td>1,199</td>
<td>1,922</td>
<td>19749</td>
<td>3,828</td>
</tr>
<tr>
<td>0 – 14</td>
<td>59866</td>
<td>172</td>
<td>291</td>
<td>2693</td>
<td>583</td>
</tr>
<tr>
<td>Male 15 – 59</td>
<td>134261</td>
<td>354</td>
<td>639</td>
<td>6679</td>
<td>1,242</td>
</tr>
<tr>
<td>Female 15 – 54</td>
<td>135375</td>
<td>348</td>
<td>557</td>
<td>6496</td>
<td>1,115</td>
</tr>
<tr>
<td>Male 60 +</td>
<td>28055</td>
<td>81</td>
<td>135</td>
<td>1017</td>
<td>269</td>
</tr>
<tr>
<td>Female 55 +</td>
<td>55325</td>
<td>150</td>
<td>242</td>
<td>2111</td>
<td>473</td>
</tr>
<tr>
<td>Unknown</td>
<td>16230</td>
<td>94</td>
<td>58</td>
<td>763</td>
<td>146</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Most pri Bratislave</th>
<th>Zálesie</th>
<th>Ivanka pri Dunaji</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>1,555</td>
<td>750</td>
<td>4,989</td>
</tr>
<tr>
<td>0 – 14</td>
<td>257</td>
<td>121</td>
<td>782</td>
</tr>
<tr>
<td>Male 15 – 59</td>
<td>519</td>
<td>259</td>
<td>1,592</td>
</tr>
</tbody>
</table>

Source: Slovak National Census 2001, SŠÚ, 2001
The available statistical data show that the health condition of the Bratislava population is not worse than the Slovak average. On the contrary, it appears to be better based on the data observed, despite the air pollution of the Bratislava area, which is the heaviest in comparison with the considerably less polluted rest of the country. There are certain positive factors operating, such as higher education level resulting in a more rational life style (in terms of diet, physical activity, stress management, etc.). The city life is attractive to marginal groups, such as persons with various types of addiction problems, prostitution of both genders, homeless people, etc., which causes various problems in the city. The said group appear in the statistics concerning selected infectious diseases, e.g. HIV positive and affected by AIDS. The mortality in Bratislava per 100 thousand inhabitants according to death cause and district in 2003 is described in the following table:

<table>
<thead>
<tr>
<th>Name of disease</th>
<th>Bratislava 1</th>
<th>Bratislava 2</th>
<th>Bratislava 3</th>
<th>Bratislava 4</th>
<th>Bratislava 5</th>
<th>Bratislava together</th>
</tr>
</thead>
<tbody>
<tr>
<td>infectious and parasitic diseases</td>
<td>4.58</td>
<td>5.56</td>
<td>9.74</td>
<td>4.29</td>
<td>5.83</td>
<td>5.86</td>
</tr>
<tr>
<td>tumours</td>
<td>368.75</td>
<td>305.69</td>
<td>308.38</td>
<td>206.11</td>
<td>141.65</td>
<td>244.61</td>
</tr>
<tr>
<td>diseases of blood and blood generating organs</td>
<td>2.29</td>
<td>0.93</td>
<td>1.62</td>
<td>1.07</td>
<td>0</td>
<td>0.94</td>
</tr>
<tr>
<td>gland, metabolic and nutrition diseases</td>
<td>27.48</td>
<td>13.89</td>
<td>11.36</td>
<td>11.81</td>
<td>11.67</td>
<td>13.84</td>
</tr>
<tr>
<td>mental illnesses</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>diseases of the nervous system</td>
<td>11.45</td>
<td>19.45</td>
<td>17.85</td>
<td>10.74</td>
<td>10.0</td>
<td>13.84</td>
</tr>
<tr>
<td>circulation diseases</td>
<td>817.66</td>
<td>550.24</td>
<td>634.61</td>
<td>378.95</td>
<td>248.30</td>
<td>467.41</td>
</tr>
<tr>
<td>respiratory diseases</td>
<td>66.42</td>
<td>57.43</td>
<td>69.79</td>
<td>42.94</td>
<td>25.83</td>
<td>48.08</td>
</tr>
<tr>
<td>digestive diseases</td>
<td>48.10</td>
<td>56.51</td>
<td>60.05</td>
<td>46.16</td>
<td>32.50</td>
<td>47.14</td>
</tr>
<tr>
<td>pregnancy, labour and puerperal complications</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>muscle and bone diseases</td>
<td>2.29</td>
<td>0.93</td>
<td>3.25</td>
<td>3.22</td>
<td>0.83</td>
<td>1.88</td>
</tr>
<tr>
<td>diseases of the skin and subcutaneous tissue</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>perinatal diseases</td>
<td>0</td>
<td>5.56</td>
<td>1.62</td>
<td>1.07</td>
<td>0.83</td>
<td>2.11</td>
</tr>
<tr>
<td>urinary and venereal diseases</td>
<td>27.48</td>
<td>21.31</td>
<td>29.21</td>
<td>16.10</td>
<td>8.33</td>
<td>18.29</td>
</tr>
<tr>
<td>congenital disorders</td>
<td>2.29</td>
<td>0</td>
<td>1.62</td>
<td>3.22</td>
<td>0.83</td>
<td>1.41</td>
</tr>
<tr>
<td>injuries and poisonings</td>
<td>52.58</td>
<td>53.73</td>
<td>53.56</td>
<td>54.75</td>
<td>48.33</td>
<td>52.30</td>
</tr>
<tr>
<td>intentional self-harm</td>
<td>11.45</td>
<td>17.60</td>
<td>16.23</td>
<td>19.32</td>
<td>9.17</td>
<td>14.78</td>
</tr>
</tbody>
</table>

Source: Institute of Health Information and Statistics in Bratislava

Municipalities involved

Bratislava, the capital of the Slovak Republic

The historical image and urban layout of the city of Bratislava have evolved since the prehistoric times. Geographical and natural factors have shaped the human settlement of the territory of Bratislava. The Danube channel of and the morphology of the surrounding territory formed the historical core and local infrastructure, giving rise to the settlement. The positional stabilization of the city’s territory was
determined by the ford across the river and passes through the Carpathians: north - south direction. The Danube delimited the second general traffic direction: west - east. Both directions were part of transcontinental routes.

The current urban concept of spatial arrangement and image of Bratislava has been impacted by important construction initiatives in the history of its development. Wine making has been documented by archaeological findings from as early as the end of the ancient times. Archaeological monuments of important buildings of the Roman fortification system of Limes Romanus in the city district of Rusovce - military camp Gerulata and Villa Rustica in the city district of Dúbravka have been preserved from the Roman period. The most important monuments of the Great Moravian Empire are archaeological sites situated in the Slavic settlements area on the Castle Hill and the cliff of Devín.

Written proof of the Bratislava foundation dates back to the year 1291. The most important era in the development of the medieval city is a 250-year period of Bratislava's prominence as a coronation city of the Austro-Hungarian Empire. The late 17th and early 18th centuries saw the medieval core merge with the suburbs, forming a single unit surrounded by palisades (the internal walls were demolished in 1774). The demolition of the internal city walls created conditions for the emergence of a new settlement over the external fortification (palisades), and the town began to develop a radial-orbital operational and compositional arrangement. Until the first half of the 18th century Bratislava has been developing as one of the most beautiful cities of the monarchy. All major roads come from the Old Town which is the historical core of the settlement arrangement. The most characteristic construction granting the city its typical image and panorama has already been built in this time period: Bratislava Castle with the extramural settlement, the representative sacral as well as civil monuments, the promenade together with the construction of a theatre in Petržalka, and entertainment facilities for citizens on the islands of the unregulated Danube. The former suburbs gradually transform into new characteristic urban districts, following the circle of aristocratic summer palaces and gardens, originally built behind the city walls. The industry development in the second half of the 19th century left its mark of sprawl of industrial objects on the perimeter of the city. The railroad from Bratislava to Trnava was built, creating an important traffic flow (Dostojevského rad street - V. Karadžič street). In this period, the development differentiation in the settlement structure according to the social stratification of the population begins to be consistently applied. The Old Town is shaped into a centre of shopping and the first rental houses are built. New residential areas arise. New worker colonies emerge in the suburbs in connection with new industrial areas and objects. After the bridge construction (in today’s Old Bridge location), Štúrova street with representational urban areas is built.

After the war, in 1946, the territory of the city was extended by eight adjacent municipalities of Petržalka, Vajnory, Prievoz, Devín, Karlova Ves, Dúbravka and Lamač. The area of the city in 1945 was 68.58 km² and after the affiliation of the municipalities it reached 187.88 km². That allowed careful evaluation of the compact city area as well as introduced a principle of territorial development in terms of key developmental directions. The periods of the 1950s and 1960s were marked by considerable demolition interventions in the historic city centre and in the adjacent areas, aimed at improvement of the operation of the city. In this time the housing fund was renewed and first apartment houses of the residential areas were built in Račianska street, Hostinského and Miletíčova street, in the Ružová dolina area the Ružinov neighbourhood, including the districts of Štrkovec, Trávniky, Ostredky and Pošeň. The existing industrial areas are modernized, as well as new factories, campuses (STU, UK) and dormitories, primary and secondary schools, the Kramáre hospital, science and research institutes, representational facilities of administration, state and municipal administration, cultural facilities including PKO and reconstruction of the Bratislava Castle.
After the 1968, other municipalities were affiliated to the city territory, namely Podunajské Biskupice, Vrakuňa, Záhorská Bystrica, Jarovce, Rusovce, Čunovo, which brought the current city area to 367.49 km². The development of the various radial growth directions increases, including the completion of parallel spaces interconnecting the radial roads especially within the compact city. In the 1970s, new blocks of flats were built and completed, such as Karlova Ves, Záluhy, Rača, Petržalka, often including only the housing facilities. The realization of new housing areas and the radical solutions of traffic problems including the construction of the Novy bridge requested major demolition of the original housing fund, failing to consider the protection of cultural and social values mainly in the city centre.

Bratislava became the capital of Slovakia for the first time after the foundation of the Czechoslovak republic in the year 1918. The territory development but also the economic basis after the Second. The position of Bratislava strengthens due to new relations of ČSFR in 1970. The city became a full-fledged and internationally recognized capital of a sovereign state in 1993, after the foundation of the Slovak Republic. Bratislava, the capital of the Slovak Republic, is the seat of the President of the Slovak Republic, the Parliament of the Slovak Republic, as well as the central and local state administration bodies. The city is the cultural, social, educational, scientific and research as well as economic capital of Slovakia. Also, it is the most important Slovak urban centre of international tourism. The social infrastructure facilities in the territory of Bratislava provide highly specialised services to the citizens of the entire Slovakia.

The capital with its surroundings currently represents one of the two main residential centres of the macro-settlement system of Slovakia bearing international importance. A special feature of the settlement structure of the Western Slovakia region is the fact that despite the attraction power of Bratislava, in the 46-60 km marginal zone strong settlement centres with a developed economic and cultural - social base have evolved (such as the towns of Trnava, Hlohovec, Galanta, Dunajská Streda, in wider relations Nitra, Senica). Most of them are connected to Bratislava through an efficient communication system in direction of the core urbanization axes, including the railway connection. These settlements along with the tertiary nuclei in the region of Bratislava create a potential, in case of coordinated development, in terms of guidance to possible migration pressure within the territory of the EU border. Bratislava, as a part of the settlement system of the Western Slovakia having close relations with the territory of Vienna, Brno - Břeclav, Győr and Budapest, and as one of the settlement points situated along the river Danube, possesses the potential to promote the participation not only of the capital with its background, but also of the entire Slovakia in the European flow of capital and goods, as well as in the science, research and socio-cultural international cooperation. There is a space for representation and benefitting from the existing values and the development potential of the entire Slovakia and its regions.

The prerequisite for making the most of the strategic nationwide potential of Bratislava and its hinterland is, above all, to meet the requirement of the environment quality improvement. In spite of the positive developments, the environment within the Bratislava territory is one of the most heavily impacted and burdened areas in Slovakia.

According to the conclusions of the Austrian part of the analyses within the common trilateral strategy JORDES+, the Austrian municipalities situated north of the Danube will be impacted by the region integration process in a different manner than the municipalities located on the south side of the Danube. The Danube and Morava rivers form a strong spatial barrier. The centres which the development may focus on are located out of the interested territory JORDES+ (Břeclav, Brno). In the territories north of Vienna and Bratislava, it is necessary to envisage a linear growth along the traffic axes. On the contrary, the southern areas are expected to extend horizontally over the settlement areas. The municipalities of Berg, Wolfsthal and Kittsee, located near Bratislava, will feel the influence of such developments the most. It is difficult to predict the speed of this process. The estimates are that the municipalities will form a territorial unit with Bratislava in the future. The
future functionality of the Austrian municipalities near Bratislava is currently being worked on from the traffic, economic, residential-political and urbanistic points of view. The current valid planning documentation of the settlements involved consider their functions in terms of the Austrian border space. The open border attribute has not been included yet among the instruments of the territorial planning of the Austrian municipalities.

The conclusions of the analyses state that the Slovak side has already been offering and satiating the specific demands of the population within its international background. Mainly regarding the commerce, services, capitalizing on the socio-cultural attributes of the city, values of tourism, existing traffic infrastructure and satisfying the Austrian border territory demands through specific facilities of technical infrastructure. The potential of a developing territory in direct relation to international background, as well as capitalizing on the natural potential of the city will promote the improvement in the quality of relations and create an offer of highly attractive job opportunities, also for the inhabitants of the Austrian and Hungarian border territory.

Within specific international relations, it is possible to consider the system of tertiary centres of the Bratislava region also in connection with the neighbouring states, specifically in existing as well as potentially functional and operating relations of Bratislava with the cities of Mosonmagyárovár in Hungary, Bruck/L, Hainburg, Marchegg, partially Gänserndorf in Austria. These settlements have already had the tertiary centre importance, or their development in this sense has been planned.

Municipal District of Jarovce

Jarovce is situated on the right bank of the river Danube at 9 km distance south - east from Bratislava. Considering the location of the municipality, it is probable that the territory was inhabited mainly in the Roman era, when the adjacent Rusovce, the ancient Gerulata, was an important point of the fortification complex in the border area the northern Roman provinces. Jarovce and Rusovce did not belong the Bratislava County by their geographical location, but into the Transdanubia, where they had an important role in the state defence after the formation of the Hungarian monarchy. The oldest written mention of the municipality dates back to 1208. In the document, there is also a mention of the village of Ban, located in the area of today's Jarovce, which also recent archaeological findings from the local cemetery support. It appears that the municipality of Ban ceased to exist due to the major plague epidemic in western Transdanubia between 1409 and 1410 and also as a consequence of exhausting fights between Matthias Corvinus and the German Emperor Frederick III occurring in this region. Today's Jarovce originated in the first half of the 16th century. The municipality was found by Croats who called it Chorvátska Ves (Croatian Town) - Horváth falu. The German name "Kroatisch Jahrendorf" became widely popular, given that the municipality was part of the Kopčianske panstvo (estate) - Austria from its origin. After the First World War, the Trianon conference determined the borders of the Czechoslovak Republic so that Jarovce became part of the Hungarian territory. It was annexed to Czechoslovakia only after October, 15 of 1947. From 1947 to 1950 Jarovce belonged to the local administration commission in Rusovce. On the 9th of August 1950, the local national committee in Jarovce was established. It belonged to the Bratislava-countryside district. Jarovce became part of Bratislava on January the 1st 1972. Considering that there is mostly agricultural production in Jarovce to this day, the recovery of the historical symbol is appropriate for the municipality. The recovered coat of arms of Jarovce consists of a green shield with a silver plough blade positioned between two golden spikes.
Municipal District of Rusovce

This district of the capital of the Slovak Republic was proclaimed cultural monument zone, following a proposal of the City Administration of Monument Management and Conservation and Protection of Environment in Bratislava on October the 1st, 1990. Enclosed by the Balkánska street in the north and west, by the Maďarská street from the south and by the Rusovský channel from the east, the territory is an important archaeological location documenting the settlement from the prehistoric times to the present. The ruins of the castle from the Roman period, which is unique in Slovakia, are covered by folk architecture and complemented by a large historical park, yielding gradually near the castle to the alluvial forests along the Danube.

The position of the municipality within the communication relations of the region played an important role in its development: besides the road from Hainburg to Győr crossing the area, it was, above all, its location at the crossroads of the Danubian trade route and the Amber route (north-to-south), which had two main fords at the Danube, precisely at the so called Bergel in Rusovce (in addition to the ford at Vodná veža (Water Tower) in Bratislava). The first written record of the Rusovce settlement dates back to 1208. It appears in a document by which Andrew II confirms the foundation of the Benedictine Abbey in Lebény. During the first centuries of the Hungary kingdom existence, Rusovce was an important border fortress, acquiring a trade centre importance with a right to market in the late 14th century. The population was originally Slavic, devoted to agriculture. In the course of the 15th century, a Jewish community settled in the area, becoming a major leader in the development of trade. The Croats arrived to Rusovce in the 16th century. In 1646, Count Stephen Zichy gained most part of the land. From the 18th century until 1947, Rusovce belonged to Hungary, passing to Czechoslovakia in 1947 together with Jarovce and Čunovo, following the results of the Paris Peace Conference. The population lived off agriculture, cultivation of fruit and carrying trade.

The area of today's Irkutská, Maďarská and Gerulátska streets with the St. Marry of Magdala Church on the hill, heading towards the Danube ford is considered to be the foundation of the original urban structure of the municipality. The development of the municipality was influenced to a great extent by the closing of the Danube arm in the 1880s (approximately from 1775 to 1777). As a result of the ford abandonment and the construction of the Danube dam, the road lost its original purpose. The focal point of the municipality development moved west, where the existing urban structure began to expand. The basis of the new urban unit was formed by the elliptical square consisting of today's Balkánska street, crossed by a trade route between Hungary and Austria, which gradually connected to a younger street network. Historical and urban development of the municipality was determined by two basic facts. The first was the existence of a longitudinal type of street pattern enlarging in a spindle-like manner in the middle. The second fact forming the footprint of the municipality are rows of adjacent parcels on both sides of the street axis. The housing development of the municipality was determined by a longitudinal medieval parcel, which is filled by a residential part until about a half of the deep axis. The part is perpendicular to the street with adjoining farm buildings and a yard which was originally closed by an independent barn. A relatively independent part of the municipality is the castle with accessory buildings and a large historical park.

The traces of the oldest people living in the area of the present Rusovce date back to the Early Bronze Age (approximately 2200 – 1600 B.C.). There was a time when the so called Wieselburg culture representatives (whom we name this way due to their unknown ethnic origin) appeared in the region. This culture is one of the oldest of the Bronze Age in Slovakia. After the early Bronze
Age, there was an almost thousand year long period which is not documented by any remnants of settlement in Rusovce. Other findings come from the 7th century B.C. In the same elevated space where a burying place of the Bronze Age had been located, there were found graves from the Early Iron Age (Hallstatt period), the territory was inhabited also in the later Iron Age (La Tene culture). After the arrival of the Romans, the most famous period in the oldest history of Rusovce began. Between 12 and 9 B.C., the territory located south from the Danube down to the Adriatic Sea became part of the Roman province Illyricum. The Danube became the border separating two worlds: the antique and the barbarian. There has been preserved a multitude of military objects (iron spear tips, parts of shields protecting the bodies of soldiers, short sword - gladius, etc.). The graves of women contained various jewellery, such as bracelets, necklaces, decorative hair pins, but also objects used in cosmetics and, of course, coins. The Slavs come to Rusovce in the 9th century.

Rusovce is a popular place for walking and hiking. Among the most admired monuments are the castle, Ancient Gerulata, churches of the Evangelical Church, St. Venceslaus, Marry of Magdala and the attractive Rusovce Park. The city district of Rusovce has children folk choir Gerulata and offers a wide range of cultural events every year, including the most well-known historical fire fighting equipment competition and Zadunajsky majales (Transdanubian party) and performances of SLUK (Slovak Folk Artists Association).

Bratislava, Municipal District of Podunajske Biskupice

The municipal district of Podunajske Biskupice is a part of the agglomeration of Bratislava. The current image and urban arrangement of the historical town of Bratislava is a result of a long-term process dating back to the ancient times. Bratislava is among those few European cities whose history is very rich in historical events. Its geographical position at the foot of the Little Carpathians and in direct vicinity of the Danube created a suitable environment for permanent settlement. It is possible to say that it used to be a traffic crossroads of two important routes in Central Europe, e.g. the Amber route in direction North - South and the Danube - Rhine route in the direction East - West. The history of Bratislava is very rich in events of great importance. At present, it fulfils the function of the capital of the Slovak Republic. Due to its location near the border with Hungary and Austria, Bratislava has established relations with the Vienna and Győr regions. Such location factors, as well as its human potential, create conditions for future development of the city and its background as a settlement and place of European importance showing potential for further territorial and demographic development.

Until 1909, Podunajské Biskupice were called Biskupice-Püspöki. In 1912 they were given the attribute of Bratislava - Bratislavské Biskupice, Pozsonypüspöki in Hungarian. From 1928, they were called Biskupice pri Dunaji and since 1944 the municipality has been named Podunajské Biskupice. The municipality territory was probably first inhabited in the Roman Empire times, which is testified by a Roman milestone found in Biskupice, worked stones with Latin writings built in the gable wall of the parish church of St. Nicolaus, and bricks and roof tiles with a seal of a Roman military camp. The first written mention of the church of St. Nicolaus dates back to 1221. Previously, an older church had been built at the same place. On the site of today's Biskupice, there had been Kirchbach, a centre of the Avar province Vetvár, hosting the seat of Avar bishops. The name "Biskupice" is likely to come from that time period. After the foundation of the Archbishopric of Esztergom, the territory passed into its estate, where it belonged until 1912. The Kuruc-Labanc fighting was followed by the arrival of a strong colony of Saxon Germans in Biskupice. In the period after 1918, also a Slovak colony of people coming from Kysuce, Orava and other Slovak regions was formed, including emigrants from Yugoslavia and Romania. After the construction of
blocks of flats, Podunajské Biskupice were attached to Bratislava as of January the 1\textsuperscript{st} 1972. Since 1990, they have become one of the seventeen municipal districts of Bratislava. In the municipal district, there is also a George Albert mansion from the 18\textsuperscript{th} century, and a plague column of the St. Trinity from 1730.

Municipal District of Vajnory

The municipal district of Vajnory is situated at the foot of the Little Carpathians, at the altitude of 130-133m above sea level. With an area of 13.5 km\textsuperscript{2} and approximately 4000 residents, it is one of smaller districts of the capital of the Slovak Republic.

First mentions of a settlement in the Vajnory territory date back to the Late Iron age - La Tene, i.e. approximately 2300 years ago. During a motorway construction, there was also found a Slavonic-Avar cemetery, including ten skeleton tombs and six Slavonic urns of ancient shape. The site was not preserved. The original municipality originated as a subject settlement of the Bratislava Castle. Its inhabitants served the city, providing the royal court with their quality wine. The oldest written mention dates back only to 1237, when the place had become a developed village (villa). It bore the original Slav name of Prača, or Pračany. From 1307, when the municipality was owned by an Austrian monastery in Heiligenkreuz, the German name of Weinern had came into usage, referring to the prevailing activity of the residents - viticulture and wine-making. The name has been used to this day in the adapted Slovak form of Vajnory. In the 16\textsuperscript{th} century, the village was purchased by the city, so that Vajnory could return to the original owner and founder. The abolition of serfdom represented a change, allowing the municipality to become independent in 1851. Vajnory became a municipal district of Bratislava again, but no sooner than in 1946 after the World War II.

Vajnory possessed their own municipal coat-of-arms seal equipped with a circular writing SIG: DES. RICHTER. V. WEINER. There is a winemaker motive in the middle of its Renaissance coat of arms - a bunch of grapes, a winemaker's knife with two roses on its sides. A bigger coat-of-arms seal has been known since 1628. With a circular writing SIGILLVM: PRACHENSE 1.6.2.8 contains a motive of a figure of St. Ladislaus, whom the Vajnory church was dedicated to in the 14\textsuperscript{th} century. Considering the late Gothic form of the coat-of-arms, the seal must have had a preceding model.

Most pri Bratislave

The municipality of Most pri Bratislave lies south-east from Bratislava, the capital of Slovakia. It is situated 4km from the outskirts of Bratislava. It is crossed by the second most important road traffic route to Dunajská Streda and Komárno. It occupies a plain area of 1901 ha. At present, the population consists of 1540 residents. The location of the suburban district enables the residents to commute to work, school, cultural events, or shopping to Bratislava in a very short amount of time, while living out of the city offers a quiet natural countryside.
The oldest settlement is represented by Old Slavic dwellings equipped with remnants of vessels, bones of animals and an amorphous green object from the 8th to 9th century in location "Pod Pšenom" (Under the Millet) (folk name - Srňacie). The municipality, in its present day form, originated in 1947, when Most, called na Ostrove (on the Island) at that time, was attached to the municipal district of Tomášov under the Hungarian name of Hideghét. The name was changed to Most pri Bratislave in 1947.

The municipality is documented as of 1283 (Pruck), later called Hidas. The municipality represented an ancient privileged settlement, which received the rights already in the 13th century and was the king's property. It belonged in part to the Eberhardt manor and in part to several yeomen families. In 1715 there were two mills and a meat processing facility in the municipality, as well as 30 tax payers, while in 1828, there were 110 houses and 790 residents. There were also 4 wooden bridges.

The municipality experienced waves of further settlers after the invasion of the Turks. In the first half of the 18th century it was a colony from Carinthia. A strong wave arrived after the 1945, when the residents of German and Hungarian nationality were exiled. 200 families from northern and central Slovakia arrived to the town. Between 1953 and 1954, 26 families from Romania, Hungary, Bulgaria and Yugoslavia moved to Most pri Bratislave. The residents almost exclusively lived off agriculture until very recently.

The municipality of Hideghét is documented in 1283 as Vtiheth, later Heet. It belonged to yeomen families. During feudalism, it was a yeoman village. In 1828, the municipality counted 26 houses and 189 residents. In 1971 the name was changed (slovakised) to Studené. The settlement originally developed as a false spindel-like village. Nowadays, it can be described as a group road village with a net-shaped pattern. The houses from the 19th century are brick built, three-room, with brick gables and hard covering, daubed and whitewashed. Accessory farm buildings are built behind the residential houses, in closed and/or open yards.

**Zálesie**

The land area of today's Zálesie was a property of the Malinovo estate, which originally belonged to the counts of Svätý Jur and Pezinok from the Hunt-Poznan line. The family had built a water castle in Malinovo. The family later split into a Svätý Jur and Malinovo lines, while the castle became property of the latter. In 1543 the family of counts from Svätý Jur and Pezinok faces the absence of any male descendant, and so the huge property passes to the State. King Ferdinand donated the Malinovo estate to the Mereys. The estate underwent various changes of ownership. In 1810 it was purchased by Anna Zichyová, the wife of Juraj Apponyi. They were the grandparents of the Count Albert Apponyi. The territory between Malinovo (Eberhard) and Ivanka pri Dunaji was called Tökes (Klatov today's Zálesie). It was divided in three parts: the upper, the middle and the lower. The Apponyi family built several farms and solitary buildings on their large estate. One of the farms was called Jurajov dvor (George's yard), where there were three structures standing next to each other (a tenants house, peasants' flats, a stable, and stock houses). They have been preserved to this day, obviously including certain changes. They have been partially renovated and serve different purposes.

After the foundation of the first Czechoslovak Republic, the situation changes dramatically. One of the laws passed by the parliament was the law on seizure of the estates and their partial allotment. The permit of allotment concerned 1603 ha of the estate and the sale was planned for the 1921. It is here where Ignác Gessay enters the scene, with the intent of helping the Slovaks returning from abroad. With the support of the Slovenská Bank, he acquires the land that had been divided and sold with inadequate profit. The Slovaks, mainly those from the northern parts of Slovakia, were offered 604 ha of land for sale. Such news had to sound amazing to many, given the times after the war, when there was no fertile land or industry, no jobs for the inhabitants, and subsequently
migration peaked in the area. It was possible to buy good quality land, farm independently and earn one's own living.

In 1923 first Slovaks from the northern Slovakia moved in. They came from Terchová, Nová Bystrica, Stará Bystrica, and Čadca. From Zliechov, Horné Zelenice, Siladice, and Sasinkov. To help local people, Ignác Gessay, established Stavebné a bytové družstvo (Construction and housing cooperative) which, using the local materials, built houses for those who decided to settle permanently in the area. Loans were granted and debts settled. In short time, 30 farmsteads were built for the immigrants to be bought and paid in instalments beginning in 1927. Moreover, Rolnícka banka (Farm bank) was offering convenient loans to buy agriculture machinery, animals, seeds, etc. The municipality office and the Parish seat was in Tomášov, the municipal school in Malinovo. Life was difficult. People lived on agriculture and farm animals breeding. The dense forest lands receded. Wood was used for construction as well as in households. In times of workforce shortage, many leave to find jobs in America.

Ivanka pri Dunaji

The municipality is located in the flat area of the danubian valley, south of the Bratislava - Senec road, at 128 - 132 m above sea level. It covers 1 425.7 ha.

The origins of the settlement date back to the 4th century B.C., when the area was inhabited by Early Iron Age people of the Neolithic culture. The first written mention of the existence of the municipality is from 1209. It is a deed of donation by which King Andrew II was giving Svätý Jur, Čeklis, Iwand, Eberhart and the town of Kastelan to Tomáš from Hont – Svátojurský for his service in fighting against the Bulgarians at the Morava river in 1205. The settlement of Farná has been part of Ivanka from the beginning - it was an ancient property of the ordines and provost office in Bratislava. Their servants and assistants had lived there already in 1290. That is the reason why they were called "popné", "poppnepe" i.e. priest's people (a Pop - is an Old Slavic priest. At present the name denotes a Russian priest.). Due to the Hungarian influence, the name underwent various changes: Popfolna-Papfalva-Pafár-Farná.

Farná and Ivanka have formed a political unit since 1932. In preserved church documents, in the part describing the collection of the papal tenth in 1324, the municipality is named Terra Iwan, i.e. Land of Ján. These documents also mention the church and the parish. At the beginning of the 15th century, in the period of a considerable German influence, Iwand becomes a German settlement named Aichen. In the 16th century, it passes to Hungarians who call it Aicha. In 1526, after the defeat of the Hungarians at Mohács, when the Turks appropriated a major part of Hungary, King Ferdinand II issued an order to list and describe all courtyards - ports for the purpose of tax collection in 1553. The list includes the municipality of Iwáni with its lords G. Šerédy, and later Leonard Amade. In the 18th century, the Ivanka estate was bought by Anton I. Grassalkovich, a land administrator and an actual secret counsellor of the sovereign Maria Theresa. On January the 1th, 1943 the Jesuites moved into the Ivanka castle. In the castle, they established a dormitory for the youth studying at their gymnasium in Bratislava. In 1948 the property was communised, passing to the Agriculture Commission which occasionally used it for various purposes, such as trainings, etc. World War II significantly impacted the life in the area, given the geographical location in proximity of Bratislava. After the 2nd of April 1945, the liberation of the town, the local life took a new direction. In 1950, a Collective Farm was founded. The collective joined the State property in 1962, creating the National Poultry Enterprise, which, along with the Research Institute
of Poultry Keeping and Breeding, determined the direction of the municipality development and offered jobs to a major part of the population. In 1961, the Secondary Agricultural Technical School with a focus on poultry-keeping with a nationwide scope was established. Later, also an agriculture machinery repair shop. Various public-service buildings, such as a primary school, a shopping centre, a healthcare centre were built. Collective as well as individual construction developed. In a majority of the town, the gas and water supplies were introduced and the local infrastructure was built. Several scientific institutes of different fields and levels, including the academic, were founded. Their importance crossed not only the village, but also the country boundaries.

Within the urban concept of Bratislava, the developing construction in the individual parts and districts of Most pri Bratislave, Zálesie, and Ivanka pri Dunaji maintain their peculiar characteristics of solitaires with individual central nodal parts.

Production activities

The production structure is represented by sectors of industrial production, building production, production services and agricultural production. It is an activity concerning obtaining material objects from nature and their subsequent processing. The production sectors influence the state economy to a great extent, provided that they considerably contribute to the GNP formation. Also, these sectors have undergone huge capacity, structure and transformation changes. This process has been evident also in the Bratislava area - many businesses have closed, new have been established and the transformation has been very visible as well. Bratislava production companies represent the most important structure in Slovakia, as they account for over 35% of the national creation of VAT and they also achieve the highest work productivity.

In terms of economic performance of Slovakia, only the Bratislava region has a performance comparable to the EU average (in 2001, 101% of the EU average). Other regions move about 40-46% of the EU average and are classified as less developed. The mentioned disproportion in the GDP formation in the regions are mostly linked to their fixed assets per capita. In the Bratislava region this indicator exceeds SKK 1.9 million per capita, while in other regions it varies between SKK 252 and 361 thousand per capita.

Residential and recreation functions have currently become predominant in the municipalities of Most pri Bratislave, Zálesie and Ivanka pri Dunaji. A smaller part of the cadastral area of the municipalities has been dedicated to production in their zoning plans.

Industry

In terms of processing industries in Bratislava, a leading position is held by the manufacture of transport equipment, refined petroleum products, chemical products, and publishing and printing industry. Food industry is also significant. In recent years, the construction industry has seen a massive soar.

Industrial production in Bratislava continues to significantly exceed the national average in all indicators. The Bratislava share in the national industrial production is 42.3%. The process of industry restructuring in Bratislava has recently been very intense, yet often lacking control. There are still several former industrial park areas which remain unused or have been transformed into warehouse sites, small and medium enterprise areas, or civic amenities.

In Bratislava, there are more than 22 thousand economically active legal entities, and 43 thousand natural persons. The biggest employers are Slovnaft, Volkswagen Slovakia, Slovenský plynárenský priemysel, Slovenské elektrárne, T–com, Henkel Slovensko, Kraft Foods Slovakia, IBM Slovensko.
The most important company in a larger sense is Slovnaft, situated in the municipal district of Podunajské Biskupice. Among smaller companies, Slovasfat, Ferona, Stachema and ZIPP are located in the area. Considering the prevailing agricultural character of the land, there are no large industrial companies. There are only small local enterprises. Alas Slovakia performs gravel mining at the Rovinka lake.

Agriculture

At present, the agrifood complex in the Bratislava region is a demanding sector in terms of its production, as well as territorial distribution, and is closely related to material, social and cultural development of rural areas. Therefore, its further development should rely on maintaining the sustainability of suburban settlements through the development of employment and infrastructure. Production capability of the agricultural lands in this area is very good, although their agronomic value is negatively influenced by the lack of moisture in the growing season.

There are 8 suburban agricultural collective farms in the territory, namely: PD Prievoz, Villa Vino Rača, a.s., PD Vajnory, PD Vinohrady, PD Dunaj Rusovce, DP Devin, PD Podunajské Biskupice, RD Zeleninárstvo Bratislava. These agriculture farms cultivate 9,942 ha of farm land (data from 2004). The majority of the land is cultivated by four of the agricultural farms, namely: Rusovce (42.3%), P. Biskupice (19.1%), Devin (18.3%), and Vajnory (12.9%).

The structure of the agricultural production has undergone gradual transformation in relation to the current needs of the market demand of agricultural commodities and foods. Changes in crop production are mostly characterized by a modest growth of the cereals and oilseeds areas. The production aims at supplying the city of Bratislava. Considering the city demands, the decrease in vegetable land area represents a major problem. High performance is achieved in the cultivation of cereals (wheat), the most widespread crop in these suburban areas. The vineyards have witnessed a decrease in acreage.

Forestry and water management, fishing and hunting

The forest of Bratislava covers 8,280 ha of forest land (it is a part of the BLP - Bratislava Forest Park), which means an approximately 23%-forestation of the Bratislava territory. The forest spreads over two different geomorphological subsystems: Lesser Carpathians (approximately 75%) and Danube Floodplains (approximately 25%). Since July 11, 1994 Mestské lesy (City Forests) in Bratislava (MLB) have been in charge of the forests of the Bratislava city covering a land area of 3,059 ha (2,873 ha of which are forests).

According to the classification of the forests in terms of prevailing functions, the forests are divided into forests with special purposes, and protected forests. The process of management of the forests involved is concerned mainly with public functions as well as significant production functions (production forests). Contrary to production forests, the protected forests and special purpose forests, undergo preferably a softer, purposeful, or selective cultivation modality in production.

Aiming at preserving the united ecosystem of the Bratislava City Forests, which have survived to this day thanks to high professionalism of generations of foresters, the principle of sustainable development has been promoted. The sustainability has been no longer limited to products and use. It has progressed to the principle of the ecological sustainability of forests.

Forest management in city territory is performed by MLB, Mestské lesy Svätý Jur, Lesy SR, š.p. Banská Bystrica, Lesné spoločenstvá Lamač, Záhorská Bystrica and other smaller subjects, in accordance with LHP (Forest management policy).
Fishing is also widespread in the area. Former gravel deposit areas are used for fish cultivation. Near the motorway route, there are fisheries managed by local organisations of the Slovak Fishing Association, namely fishing carp waters Rusovecká sústava ramien (Rusovce river distributaries system), Zelená voda 1 a Zelená voda 2.

Hunting is also practised in the territory at issue, and it is managed by local organizations of the Slovak Hunting Association.

The area is extremely important in terms of water management. The Gabčíkovo Waterworks System, currently represented by the Hrušov reservoir and other water management objects, is among the most important water works not only in Slovakia, but also internationally, due to the influence of the Danube river. The water works serve not only for flood-protection, but also for the energy production and river traffic.

In addition, the territory is a source of drinking groundwater, covered by CHVO Žitný ostrov (protected landscape area), of Central-European importance.

Trade and services

In Bratislava, the capital of Slovakia, there are facilities of international, national, regional, urban as well as local importance. Besides the administrative, cultural and educational functions of the city, also health care, banking, insurance sector, and retail trade are a significant presence.

In Most pri Bratislave, Zálesie, and Ivanka pri Dunaji, the services and trade are proportionate to the needs of local communities. As the population increases, further development of these sectors is going to be necessary.

Tourism and recreation

Recreation - staying outside and breathing fresh air is essential for maintaining the population in good health and prevent illnesses. It is a type of outdoor relaxation or activity performed in free time, which contributes to physical and mental regeneration. Recreation areas are defined mainly as territories of unspecified character serving the recreation function, including a predominant natural element as well as sport, hiking and/or water facilities. The city of Bratislava shows considerable recreational potential of natural background, also in view of its wider regional relations, mostly in connection with recreation zones in natural mountain regions of the Lesser Carpathians, Danube floodplains, the Morava river, areas in proximity of water surfaces, as well as recreational areas at the Danube water works. The city and its background provide suitable conditions for enjoyment of water, mountains - forests, winter sports, cycling, and tourism.

The area along the Danube river is important in terms of recreation, also considering its planned use for recreation and sports around the Hrušov reservoir. The Danube banks are used by active local people for walking, cycling as well as roller-skating. For swimming and bathing in summer, there are Zelená voda, Ivanka lake, Vajnory lake and the Danube meanders (housebots). According to the urban study ARST Jarovské rameno, the Jarovce distributary area has been designated to become a recreation, sport and hiking area.

Tourism is the most promising direction of the Slovak service sector. It is generally considered the sector of the future, in terms of the multiplication effects following its development. Average annual growth of tourism is predicted on a global scale at a rate of 2.5-2.8%, while in Europe the greatest growth is expected in the middle-east and south-east countries of the continent.

Tourism represents an industry of the service sector, which has a cross-cutting character. Several other industries contribute to it.
The capital of the Slovak Republic, Bratislava, has already become the most important urban centre of international as well as national tourism in terms of sight-seeing tourism. Conference tourism has begun to develop in line with the strategy aimed at shaping the city into a place of creativity and exchange of top information.

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Catering facilities, often part of tourist accommodation facilities, serve the needs of the visitors as well as the local people.

Road traffic

The basic road system of Bratislava is a separate group of roads from a selected road network, which executes a decisive share of road transport in the city and whose quality is decisive for the operability of the whole urban transport system. For the given reasons, ZAKOS received the preferential attention from the point of view of transport and engineering (the monitoring of the development in the intensity of transport (see annex), traffic accident rate and traffic modelling), complex maintenance and in particular construction development. ZAKOS consists of traffic circles (inner and central), traffic semicircle, radial roads and connecting sections. At the moment, ZAKOS consists of the following roads:

- **inner traffic circle** - Staromestská, Štefánikova, Šancová, Legionárska, Karadžičova, Dostojevského rad, Vajanského and Rázusovo nábrežie
- **central traffic circle** - Einsteinova, Pristavny most, Bajkalská, Jarošova, Račianska, Šancová, Pražská, Brnianska, Mlynská dolina, Lafranconi bridge, V1 and V2 highway branches
- **external transport semicircuit** – the D4 highway

**Radial roads**

- Lamač radial road: on roads of Hodonínska, Lamačská road, Brnianska, Pražská, with the ending in the internal traffic circle at the intersection of SSA.
- Rača radial road: on the roads of Púchovská, Račianska st. with the ending in the internal traffic circle of Račianske mýto
- Senec radial road: on the roads of Senecká, Rožňavská, Trnavská, Krížna, with the ending on the internal traffic circle
- Biskupice radial road: in the roads of Svornosti, Gagarinova, Prievozská, Mlynské nivy up to the internal traffic circle
- Rusovce radial: from the boundary with Hungary on the following communications: Balkánska cesta, Panónska cesta, Nový most bridge up to the internal transport circuit Rusovce radial road branch starts in Petržalka when crossing Dolnozemská and consists of Dolnozemská st. with the end on the Biskupice radial road
• Pečenská radial: from the boundary with Austria (at Berg) on Viedenská road with termination on Rusovce radial.

Connecting sections

• the riverbank of L. Svoboda, Starý most (the Old Bridge), Šancová street (in the section from Račianske mýto up to Trnavské mýty).

The analysis of the contemporary condition of the automotive transport implies that the greatest increase in traffic load and also the most critical situation is evident in the central traffic circuit or in contact with it on the entering radials. The request applied in all hitherto processed concept materials is proved in full and still insistently - to complete the highway sections, to complete the selected communication network by the missing sections, to extend the selected communication network by further traffic lanes, as well as the demand of re-construction of the critical intersections from level one interchanges to partially or completely grade separated.

Draft road network has been developed so that it mostly addresses:

• long-term shortcomings and disproportions of the current state,
• the requirements resulting from the main original documents, mainly the interconnection of the communication network with the European transport network,
• relief to urban road network from transit and heavy traffic,
• relief to the city centre from the interim (diagonal) transport,
• the transport interconnection with Austria and Hungary,
• traffic connection of newly urbanized areas.

The design of the communication network consists in the network of highways and the communication network the part of which is the roads of class I, II and III, as well as the local communications of class I and II. Pursuant to STN, these are expressway (A1, A2), collector (B1, B2) an servicing communications C1 and communications with mass transport. The proposal does not include the development of III. and IV. class local roads, i.e. service and access roads inside the zones which will be the subject to solution of zoning documentation. The traffic condition, as well as the results of traffic surveys, shows that the traffic situation in Bratislava and its surroundings is poor. The above mentioned road network is in many cases either solely planned or the existing technical conditions and width arrangement of these roads do not correspond to the actual daily traffic volume.

In terms of traffic engineering assessment, it would be appropriate to consider in the next five years, with the strongest intent to solve international, supra-regional and regional relations, and implement the following transport structures, beginning the construction of:

• Highway D1 Bratislava - Trnava, extending into a 6-lane road (currently being built)
• Expressway R7 Bratislava - Dunajská Lužná
• Highway D4 in the section of the interconnection of D2 from Jarovce up to D1, or to the Rača interchange
• Highway D4 - the continuation as far as D2 (Stupava - South)
• Extending road I/61 to a four-lane road with unlimited access
• The road of regional importance - the interconnection of highway D1 with road II/502 (connection to the bypass of Pezinok and Sv. Jur)
• Highway D4 - Devínska Nová Ves - state boundary with Austria
Simultaneously with these solutions, the following constructions shall continue within the city and region:

- Pezinok and Svätý Jur Bypass
- Solution of the capacity and reliability of the public transport system and general transport system

Concurrently with the historical development of the city, also its communication network has developed. Since the 1960s, the development was guided with the aim to create the radial-circular system complemented with the network of servicing streets. The system enables the optimum distribution of transport by means of circuits and also the bypass of transit transport outside the centre of the city or outside the residential zones. Bratislava is the intersection of significant European routes for the international car transport. There are three main European roads E65, E75 and E58 as well as two additional roads E571 and E575. The communication network is formed by the communications of national and supra-urban importance and local communications with the overall length of 808.8 km.

The following operated roads belong to the group of communications of nationwide and supra-urban importance:

- highways (D1, D2) with the length of 50 km that are part of the international multi-modal corridors No. IV and Va,
- roads of class I (I/2, I/61, I/63) with the length of 53 km,
- roads of class II (I/502, I/505, I/572) with the length of 31 km,
- roads of class III (III/06359, III/00246, III/0611, III/00243) with the length of 20 km.

The group of local communications includes:

- the local communications of class I and II with the overall length of 261 km, these are a part of the so called reserved communication network used also by city public transport,
- the local communications of class III and IV with the overall length of 402 km.

The impact of social and economical changes after 1989 significantly affected also the development of the traffic situation in Bratislava. The crucial factors that significantly affected and changed the traffic situation in Bratislava and the nearby proximity are as follows:

- a sudden increase in the automotive rate and greater use of passenger cars in private and business sphere,
- the stagnation of the development of the system of mass transport that contributed to the reduction in the number of transported passengers by the mass city transport,
- the long-term lagging behind of the construction of transport structures caused by the problems of their funding (the construction of the carrier system of the mass transport, the basic communication network).

Highway D4, section Jarovce - Ivanka North shall have an important function in improving the traffic relations in the catchment area and existing road system. From the transport point of view, it will connect the following roads:

**Superior road and highway network:**

- Highway D1, end of the section, flyover interchange (FOI) Ivanka North, interconnection of selected directions,
• Highway D2, beginning of the section, FOI Jarovce, interconnections of all directions,
• Highway D4, state border Slovak Republic/Austria, beginning of the section, FOI Jarovce, interconnection of all directions.

Remaining road network:
• road I/2, FOI Rusovce,
• road I/61, FOI Ivanka West,
• future interconnection of the proposed road "prolongation of Bajkalská st." at FOI Ketelec
• road I/63, FOI Rovinka (connection with R7) - Podunajské Biskupice feeder,
• road II/572, FOI Most pri Bratislave (connection to expressway - future),
• road III/0614 Zálesie, connection to the highway D4 by a feeder with the option of complete entrance and exit from the highway - future.

Railway transport
The railway node of Bratislava forms an important complex of the facilities in the network of Slovak railways. Currently, 7 track directions lead to the node - Kúty, Trnava, Galanta, Dunajská Streda, Rajka (Hungary), Marchegg (Austria), and Kittsee - Parnsdorf (Austria). The city hosts 13 railway stations, 2 deviations, and 2 stops. A total of 89.450 km of railways exist in the territory of the city; 52.515 km of that are double-track. 66% of the entire length have been electrified. In 1998, the completion of the track Bratislava Central Cargo Station - Bratislava Petržalka Station was completed, including a rebuilding of the Petržalka Station and construction of a new track to Austria (Bratislava - Parnsdorf - Vienna). In the given section, the highway D4 crosses the railway No. 132 Bratislava Petržalka – Rusovce, No. 131 Bratislava Nové Mesto - Dunajská Streda and the railway No. 130 Bratislava hlavná stanica - Galanta.

River transport
The Danube river, Europe's second biggest river, flows through Bratislava from its 1850 km to 1880 km. The width of the riverbed reaches 350 to 400 m in Bratislava, the width of the shipway with international navigation varies from 100 to 180 m. After the opening of the Rhine-Main-Danube Canal, Bratislava has moved to the geographic centre of the trans-European waterway between the Black Sea and the North Sea. The predominant carrier and water transport operator is Slovenská plavba a prístavy, a.s. Bratislava. It provides both individual and load transportation.

Air transport
There are 2 airports at the east end of Bratislava, namely Letisko M.R. Štefánika and Letisko Bratislava - Vajnory, situated north of the former. The airspace of the airports is defined vertically and horizontally by protective zones. The M.R. Štefánik airport is one of the strategic public international airports. The runway system is formed by two perpendicular runways RWY 04/22 (length of 2.900 m, width 60 m) and RWY 13/31 (length of 3.190 m, width 45 m). The airport has been operating since 1951. The development of the performance of the M.R. Štefánik airport until 1989 was characterised by a growth up to almost 500 000 passengers per year in 1989. However, after 1990, the number of passengers dropped rapidly to as low as 130 000 per year; air transportation has been reviving gradually since 1994. In 2003, the M.R. Štefánik airport served 480 000 passengers; the last statistics for 2005 state 1 326 500 passengers per year. The share of national passenger transport dropped since 1990 from 47.2% to the current 6.7%. In air transportation of goods, a very significant decrease of performance occurred after 1990 (from 5 700 tons/year to 2 013 tons/year), yet in 2003, this indicator grew to 10 746 tons/year. The
dispatching building for travellers provides the capacity of 654 passengers per hour (the contemporary peak load is 265 persons per hour). The runway system has a capacity of 205,000 airplane movements per year. Its use in 2003 was to 10.3% (21,214 movements), in 2004 it was increased to 13.2% (27,133 movements) and thus it has a sufficient reserve for further development of transport. The capacity of the dispatching area is 26 airplane stands. The technical and operation equipment of the airport are built at various qualitative levels. The highway D4 collides with the take-off and landing runways, therefore it has been proposed to run the highway under the ground level in the collision section.

The Airport of Bratislava -Vajnory belongs to small airports of regional importance. The track system is formed by two perpendicular tracks RWY 04/22 (length of 1,000 m) and RWY 13/31 (length of 650 m). The capacity of tracks is 32,000 movements of airplanes per year (in 1998 there was ca 7,700 movements). The airport serves for general aviation. The services for passengers are provided directly on the clearance area near hangars. The airport lacks facilities for a potential development of aerotaxi services.

Bicycle transport and hiking trails

Bicycle transport accounts for 1% of the transportation distribution. In Bratislava, it is mostly a seasonal way of transport, intensifying during the summer season. Nowadays, there are ca 33 km of main and ca 20 km of side cycling routes that are the part of future complete system, interconnecting the individual parts of the city and following the suburb and international cycling routes. From amongst the existing cycling routes, the most significant one is the so called International Danube Route - from the border crossing of Berg on the Danube embankment up to the border crossing of Rajka, running under the proposed D4 route. Other transit and regional routes in the surroundings:

- **Carpathian cycling route** - connecting the international Danube Cycling Path with the Little Carpathians. It runs across the Lafranconi bridge and Mlynská dolina up to the modest traffic area of Železná studnička.
- **Moravian cycling route** - starts on the left-bank of the Danube under the Nový bridge and runs on the bank (against the stream) along Karloveská zátoka and Devínska cesta to Devín, from where it continues alongside the river Morava to Devínska Nová Ves and further in direction of Záhorie region.
- **Vajnory cycling route** - starts on the bank of the Danube under the Starý (Old) bridge, connecting the centre with the north-east end of the city along the inner traffic circle.
- **Záhorie cycling route** - this regional route starts under the Devín castle, runs on north to Malacky, Holíč, ending in Senica.

Main city routes:

- **Dúbravka cycling radial road** - runs from the Lafranconi bridge through Líščie údolie in Karlova Ves to Dúbravka and Devínska Nová Ves.
- **Lamač cycling radial road** - runs from Karpatská cycling road (Červený most) through Lamač to Záhorská Bystrica.
- **Round route Slovnaft** - cross-connecting the cycling paths from Račianska st. to the Small Danube.
- **Along Chorvátske rameno (branch Chorvátske rameno + branch Starohájska)** - runs from Starý bridge along Chorvátske rameno (river distributary) with a branch on Starohájska and connection to the Danube Cycling Path.
- **Along the Small Danube** - runs from the Danube cycling path (Pálenisko) on the embankment of the Small Danube.

- **Račianska radial road** - runs from the Vajnorská cycling route in direction Krasňany and Rača district.

- **Ružinov radial road** - runs from Páričkova, Trenčianska, Ružinovská up to the edge of the Vrakuňa district.

We cross the blue tourist route passing along the right bank of the Danube. The route shall be crossed using a bridge structure.

Cycling and tourist routes in the territory involved (Tourist Atlas of Slovakia)
Disclaimer

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The name of this document in Slovak is Správa o hodnotení navrhovanej činnosti. The file name has not been changed.

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