NON-TECHNICAL SUMMARY

I. PURPOSE OF THE PROJECT

Section of D4 highway Bratislava Jarovce - Ivanka North represents a traffic link to the existing highway passages D2 and D1 in the southern and eastern part of the capital city of the Slovak Republic, Bratislava. Completion of this section will divert the transit traffic to Austria and Hungary, which currently passes D1 highway in built-up area. In this particular area it will also help the service of the affected area and relieve the villages and existing road network from transit transport Upcoming construction in section Bratislava, Jarovce - Ivanka North is one of the prepared sections of D4 highway.

The given construction of D4 highway is in accordance with the development strategy of Slovakia. The accord with international contracts and other documents the Slovak Republic is bound with is being assured by the Ministry of Transport, Construction and Regional Development of the Slovak Republic (hereinafter referred to as the MDVRR SR). At the same time the construction of D4 highway is in accordance with the Slovak Spatial Development Perspective (KURS) and the Concept of development of road and motorway network of the SR.

II. BRIEF DESCRIPTION OF THE TECHNICAL DESIGN

The construction of "Highway D4 Bratislava, Jarovce – Ivanka North" starts at the connection to the existing D2 highway in the FOI "Jarovce", in the territory of the capital city of the Slovak Republic, in the municipal part Bratislava – Jarovce. It continues further to north of Jarovce in the route of option "E" - green (in accordance with the recommendation of the Ministry of Environment of the Slovak Republic in the Final opinion of EIA of 28 September 2011), it crosses the road III/2046 and railway line 127 Bratislava – Rusovce by flyover. At the FOI "Rusovce" it is headed to the bridge over relocation of the road I/2, continues over Jarovské rameno (branch), foreseen rowing and canoeing track and over the river Danube. On the left bank of the river Danube it passes the flyover bridge until 5.5 km of D4 through the protected territory of European importance SKÚEV 0295 Biskupické Luhy (NATURA 2000), outside the Gajc Nature Reserve.

In the next section D4 highway gets from option "E" - green to option "C" - red (in accordance with the recommendation of the Ministry of Environment of the Slovak Republic in the Final opinion of EIA of 28 September 2011), whereas it bypasses the gravel mining area of Podunajské Biskupice from the southern and eastern side. In 6.736 km in FOI "Ketelec" D4 crosses the planned expressway R7 by underpass and also by underpass it crosses the access road to gamekeepers house Topoľové in 7.962 km. When compared to the original route (assessed in EIA) and in accord with the recommendations of the Final Opinion of the Ministry of Environment of the Slovak Republic for R7 Bratislava – Dunajská Lužná, the route of D4 highway has been shifted at FOI "Ketelec" by ca 235 km to the north, whereas the location of D4 highway, R7 expressway and the shape of FOI "Ketelec" are based on the blue option (A2), recommended in the Technical Study "Expressway R7 Bratislava Ketelec – Bratislava Prievoz and on the design proposed in the zoning and planning decision documentation for "Expressway R7 Bratislava – Dunajská Lužná".

D4 highway route continues the route of option "C" - red (in accordance with the recommendation of the Ministry of Environment of the Slovak Republic in the Final opinion of EIA of 28 September 2011), in cad. area Podunajské Biskupice, where by flyover it crosses (overpasses) the old Danube embankment (cultural and technical site). At the FOI "Rovinka" it crosses by flyover (underpasses) the relocated road I/63, from the southern side it bypasses the premisses of Strabag company and by elevated bridge it crosses the railway line no. 124 Bratislava – Komárno and by flyover it crosses the relocation of Vinohradnícka street between the city district Podunajské Biskupice and village Miloslavov. Further, the route of D4 highway continues to the west of village Most pri Bratislave. Direction of D4 highway was specified in the area of planned big rest area "Rovinka" - shift by ca 44 m to the south-east due to change of direction of D4 in the previous section (new location of R7 expressway, FOI "Ketelec" and need of bypassing the gravel mining area of Podunajské Biskupice), further in 10.598 km at the point of crossing the overhead 400 kV EHV lines (to the position between existing electrical poles), shift of the route further away from the premises of company Strabag, a.s. (in accordance with the recommendation of the Ministry of Environment of the Slovak Republic in the Final opinion of EIA of 28 September 2011) and shift of D4 route in 16.130 km by ca 60 m eastwards due to the need of respecting

protection zones of new position of non-directional radio beacon NDB of extended runway of the airport of M.R.Štefánik 13-31.

- In the section from km 15.000 – 22.590076, the route of highway D4 continues in the route of variant "C" - red (in accordance with the recommendation of the Ministry of Environment of the Slovak Republic in the Final Opinion of EIA Process No. 318/2010-3.4/ml of 28.9.2011), with the specification of directional run of the highway D4 pursuant to the recommended variant in the Technical Study "Highway D4 Bratislava, km 15.0 – Ivanka North intersection– Rača intersection" (elaborated in 10.2012 by the Association "D4 Bratislava, Jarovce – Rača") on the basis of the geodetic survey of the terrain while respecting the protective zones and interests of the airport of M.R.Štefánik. The route of D4 highway continues to the west of the village Most pri Bratislava, where at FOI "Most pri Bratislave" it crosses the road II/572 by flyover (underpass), crosses the Little Danube River by a bridge and bypasses the gravel mining area Zelená voda and the airport of M.R. Štefánik, continues in concurrence with Šúrsky kanál (channel) westwards of the village Ivanka pri Dunaji, intersects the road I/61 Bratislava - Senec at FOI "Ivanka - West" by flyover (overpass), intersects the railway line no. 120 Bratislava - Štúrovo by elevated bridge and ends at the FOI "Ivanka - North by connection to the existing D1 highway.

Highway D4 is projected in the entire concerned section for the design speed of v_n=120 km/h with following width arrangement:

- D 26.5 in the section of Jarovce intersection – Rusovce intersection,
- D 33,5** in the section of Rusovce intersection – Ketelec intersection,
- D 33.5 in the section of Ketelec intersection – Rovinka intersection,
- D 33.5 in the section of Rovinka intersection – Ivanka West intersection,
- D 26.5 + collectors in the section of Ivanka West intersection – Ivanka North.

In category D 33.5 with four-lane width arrangement with a spatial reserve in the central separating lane, i.e. with a wider central separating lane, so that it is possible to extend it by 6-lane towards the D4 highway axis in the future.

On D4 highway following ***flyover interchanges (FOI) are designed:***

1. FOI "Jarovce"
2. FOI "Rusovce"
3. GSI "Ketelec"
4. FOI "Rovinka"
5. FOI "Ivanka-West"
6. FOI "Ivanka-North"

Location of the construction in the territory

Construction objects shall be executed on plots based on layout plans in cadastral areas: Jarovce, Rusovce, Podunajské Biskupice, Most pri Bratislave, Farná, Ivanka pri Dunaji and Vajnory.

III. CHARACTERISTICS OF THE AFFECTED AREA

The route of D4 highway Jarovce – Ivanka North is located in the sub-province Malá Dunajská kotlina, westwards of the edge of territory Podunajská nížina Lowland, unity of Podunajská rovina Flatland.

The Podunajská rovina Flatland creates the flat aggradation flatland taking over the wide zone alongside the Danube River. The relief is flat here with an inconsiderable segmentation.

In terms of typology of the relief division a considerable part of the territory is characterised by the fluvial relief.

IV. PRINCIPAL CHARACTERISTICS OF ENVIRONMENT

Geological situation

The geological structure of wider area belonging to the SW part of the Podunajská nížina Lowland is characteristic for entire areas, by the representation of the sediments of neogene and Quaternary. In the area of the Podunajská rovina Flatland, the sediments are covered with the co-layer of fluvial sediments of the Danube River.

According to the *engineering-geological zoning* the area belongs to the region on Neogene tectonic hollows, area of Inner-Carpathian lowlands - Danubian Lowlands. There are engineering geological regions of valley river warps and neogene fine-grain sediments in the given territory.

Climate

According to the book of maps, in terms of climate, the monitored area may be classified as warm climate area with an average of 50 or more days of summer a year, with a daily maximum air temperature of ≥ 25°C, to a warm, dry precinct T2 with mild winter and temperature in January of >-3°C.
From climatic and geographic point of view, the concerned territory is characterised with warm lowland climate with moderate inversion of temperatures, dry to moderate dry. Annual total precipitation is 530 to 650 mm. Average monthly precipitation per year is 579 mm.
The territory of Bratislava with adjacent part of the Podunajská nížina Lowland belongs to the most windy territories of the Slovak Republic.

Water

Watercourses
From hydrogeographic point of view, the territory belongs to the main basin of the Danube river. Minimum water levels in the river occur during autumn and winter in the months: October, November, December, January. Maximum water levels are in March, April, May, June and July, August. From the overall length of the Danube river of 2,800 km, the section of rkm 1,708.2 – 1,888.2 (the length of the river in the Slovak Republic is 172 km) touches the territory of the Slovak Republic. Bratislava catchment area is 131,388.2 km2, the long-term average flow is 1,992 m3.s-1. In addition to the main course, however, also its tributary, the Little Danube, is important from hydrological point of view.

The water level in surface flow of the Danube is not dependent on the amount of precipitation fallen in the immediate vicinity, but on the amount of melted snow and ice in the Alps. Over the last period, the hydrological regime under Bratislava has been significantly affected by the construction of Gabčíkovo Water Dam.

Water areas
There are several water areas in the monitored territory, they are represented by naturally dead oxbow lakes of the Danube river and artificial gravel pits. Dead oxbow lakes are nowadays mostly separated from the main stream, while their water regime is heavily affected by the construction and operation of the water diversion system Gabčíkovo. The Jarovecké, Rusovecké, and Biskupické arms are located in the territory.

Groundwater
From the point of view of hydrogeological zoning of Slovakia, the given area belongs to the Q 052 – Quaternary of SW part of the Podunajská rovina Flatland region This region is the most important in terms of water management throughout the Slovak Republic and it is a tectonic depression filled mainly with Danube gravel.
Groundwater in the territory is bound to two different geological and structural units with different hydrodynamic conditions of watered horizons.

Soils
Based on pedologic research (Lazúrová, 2013) on the route of construction "Highway D4 Bratislava, Jarovce - North" soils belonging to the soil type typical prevail. They spread in the section from the junction Rusovce to the junction Rovinka and from the junction Most pri Bratislave to the junction Ivanka West. The second most common soil type on the construction route are chernozems, represented in particular by the sub-type chernozem typical. The are at the beginning of the section and in the area of the junction Rovinka to the junction Most pri Bratislave. At the end of the section there are chernozems typical in one location in the junction Ivanka West.

Substrate of all these soils are loam to sandy alluvial sediments of the Danube. It is a quality deep soil with medium deep to deep quality predominantly loam and sandy loam humus, usually without a skeleton in its profile.

The interest area is located on a flatland without a danger of water erosion; danger of wind erosion is low.

Flora and vegetation, fauna

Flora and Vegetation

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

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

Research of habitats on the route of D4 highway Jarovce - Ivanka North and on the route of all objects relating to the highway was performed in October 2013. Habitats on access roads and other objects, including interference in water streams, are mentioned in the closest highway stationing. Within the research the habitats of European importance have been identified only in one location. These are the following habitats:

Ls1.1 Willow-poplar lowland riparian forests - priority habitat of European importance,

Ls1.1 Oak-elm-ash lowland riparian forests - priority habitat of European importance,

Vo2 Natural eutrophic and mesotrophic dead waters with the vegetation of floating and/or immersed vascular plants of Magnopotamion or Hydrocharition type - habitat of European importance.

To intervene in habitat of European or national importance it is required to acquire the consent of the nature protection authority.

Based on conclusions of the Inventory and social assessment of trees growing outside forest on the route of projected construction, there are trees in total of 83 locations. It is a vegetation of trees in the surroundings of the Danube, channels and arms, riparian overgrowth, accompanying vegetation of field roads, 1st class roads, highways, railways, scattered landscaping greenery in agricultural landscape, groves, gardens. Many times it is a dense vegetation with a character of forest outside FLU. During stocktaking a total of 7780 pcs of trees and 68,427 m^2 of bush vegetation was recorded in all locations. Out of that amount the consent of the nature protection authority felling refers to 6,682 pcs. of trees and total stock-taken area of bushes, i.e. 68,427 m^2. Computed community value of trees represents a sum of EUR 10,187,087.62.

Fauna

Based on division of the territory of Slovakia to zoogeographical regions the interest area is a part of zoogeographical province of the Inner Carpathian Lowlands, Pannonian area, South Slovakia district and riparian Danube district.

In terms of occurrence of precious and protected species of animals predominantly that part of territory is interesting, which is in the section of ca 2.5 – 5.5 km, which refers to natural habitats in the environment of the Danube river and its arms. For needs of SNCA SR a research of invertebrates, amphibians and reptiles, birds and mammals was performed in the past in the territory , whereas occurrence of following species was confirmed:

- 6 species of darning needles,
- 2 species of beetles,
- 3 species of butterflies,
- 62 species of fish,
- 16 species of amphibians and reptiles,
- 8 species of bats,
- 4 species of small terrestrial mammals + beaver.

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 core of the pass through the hunting districts Jarovce, the Danube, Podunajské Biskupice, the Small Danube and Ivanka pri Dunaji. The main game is roe, rabbit and pheasant or boar and duck.

Special protection areas and protective zones

On the highway route and in its wider surroundings 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. Highway route passes directly through:

PLA Dunajské luhy
The territory of the Protected Landscape Area represents a unique natural environment under the Central-European conditions with its vast system of river branches. 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 t the Act of the National Council of the Slovak Republic N. 543/2002 Coll. on nature and landscape protection is valid in the CHKO Dunajské luhy.

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 territory of the European importance SKUEV0295 Biskupické luhy
Territory ranked to the list due to protection of habitats of European importance Thermophilic Pannonian oak forests (91H0), the Carpathian Pannonian oak and hornbeam forests (91G0), the Riparian oak-elm-ash forests around lowland rivers (91F0) and species of European importance: Great Capricorn Beetle (*Cerambyx cerdo*), Stag Beetle (*Lucanus cervus*), *Dioszeghyana schmidtii*, Bullhead (*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.

the protected avian territory SKCHVU007 Dunajské luhy
Dunajské luhy is one of three the 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 migrate. 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*), Marh Harriers (*Circus aeruginosus*) and Sand Martin (*Riparia riparia*) regularly nests in the territory. Area of the location is 16511,58 ha.

The following can be found in the vicinity of the proposed route of D4 highway:

Nature Reserve Dunajské ostrovy and SKUEV0269 Ostrovné lúčky – closest distance ca 800 m
Nature Reserve Kopáčsky ostrov – closest distance ca 385 m
Nature Reserve Gajc – in immediate vicinity or outside interference
Nature Reserve Topoľové hony – closest distance ca 850 m
SKCHVU029 Sysľovské polia – closest distance ca 240

In addition to the protected 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. These are as follows:

- **Protected water supply territory (CHVO) Žitný ostrov** – the area of Rye Island 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.

- **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 m^3, to this tap water system urban areas Rusovce and Jarovce are connected.
- **zone of hygienic protection of water source of 2nd grade Rusovce-Wetland-Ostrovné 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 1st grade Podunajské Biskupice** - was constructed in the 60-s under the name "IInd water source". Water source was commissioned in March 1966, however in July 1972 it was completely decommissioned. Although the resource has not been used any more, currently it represents a local biocentre.
- **cultural-historical site** - original anti-flood protective dam (built in the period of Austria-Hungary, under the rule of Maria Theresa) as a part of secondary anti-flood line (Hornožitnoostrovná dam), from Podunajské Biskupice towards Hamuliakovo.

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, as the capital city, is the administrative centre. The number of people present in the city during the day increased by 40 %. It results from the fact that people travel to work, school, for tourism purposes and from the fact that Bratislava is the administrative and economic centre and the destination of the transit transport. From the viewpoint of the administrative arrangement, Jarovce and Rusovce municipalities are included in District of Bratislava V, Podunajské Biskupice in District of Bratislava II, Vajnory in District of Bratislava III, Most pri Bratislave and Ivanka pri Dunaji belong to the District of Senec.

Demographic indicators:

data of the Statistical Office as at 31 December 2012:	Bratislava	Jarovce	Rusovce	Podunajské Biskupice	Vajnory	Most pri Bratislave	Ivanka pri Dunaji
Number of inhabitants	415,589.	1566	3027	21005	5,268	2369	6,011
Population density per 1 km^2	1,130	73	118	494	389	125	422
Pre-productive age	55,607	244	478	3107	791	361	999
Productive age	247,476	943	1887	12251	3,216	1520	3,478
Post-productive age	112,506	379	662	5647	1,261	488	1,534

Archaeological sites

According to the archaeological survey prepared by the archaeological institute in Nitra (Elschek, 2013) the territory affected by the construction of highway D4 in section Jarovce – Ivanka pri Dunaji has been suitable for settlement since the prehistoric times. Settlements were located on terraces near watercourses where the settlements were concentrated in the territory of the structure and its immediate surroundings from prehistoric times to date.

The oldest settlement in the geographical area began in the Neolithic Age which is confirmed by the collected material from this territory. Other findings from the Bronze Age, from the earlier Iron Age - Hallstatt and La Tene Iron Age, the holders of which were the Celts in the middle Danube.

The Bratislava territory and wider surroundings played an important role also in Roman times. The Danube became the Roman border at the turn of new era and had considerable military-strategic importance after four centuries AD. The Danube River forms a bridge between the ancient world and the Danube Barbaricum as

evidenced by the numerous Roman findings from the territory concerned, which were delivered to this territory due to the Romans trading with Germans.
The settlements were intensively established in the period of migrating nations but particularly at the time when the first Slavic groups arrived to Slovakia in 6th century, the territory considerably flourishes at the time of the Great Moravian Empire in the 9th century and in the Middle Ages.

V. THE ASSESSMENT OF EXPECTED DEVELOPMENT, SUPPOSING THE NON-IMPLEMENTATION OF THE INVESTMENT

The Development of Transport Situation
Zero state is a state specified by the road system in the affected area, while the planned investment would not be implemented and the existing road would have to cope with the increasing demands of transport.

Traffic forecast for zero state is based on the underlying case used for the preparation of regional growth rates of transport. This is basically the development of territory based on foreseen development of mobility, automobility, transport performances, and demographic potential of the territory.

The road network from 2009 was considered for this alternative. This prognosis was to server as the basis for the specification of traffic problems in the territory, focusing on the capacity requirements and subsequent modernizing of the present communication system. For the purposes of modelling of the outlook traffic situation, the method of combination of foreseen development of the affected territory, impact of broader traffic relations, and regional traffic growth coefficients published in the Methodical instruction MP 01/2006 by the Ministry of Transportation, Posts, and Telecommunications of the Slovak Republic.

For the zero variant, capacities of the sections of selected communication network of the D1 and D2 highways and affected 1st, 2nd, and 3rd class roads were assessed.

The results of capacity assessment imply some sections of the highway D1 led in the built-up territory of Bratislava would not meet the demands of the traffic load within the time horizon of 2015, since they are loaded in particular by city transport. Furthermore, the sections of Ist class roads - I/61 and I/63 are not suitable, and already have exceeded acceptable traffic levels and directly affect traffic on selected sections within the zero option.

By 2020, 2030 and 2040 , due to the increase in traffic, other sections of D1 will have become inappropriate, while the rural area of D1 Vajnory - Senec was assessed as a 6-lane road in width arrangement of D 33.5 including collectors. Increase in the capacity of certain sections of D1 by increasing the number of lanes will be very difficult or unrealistic particularly in built-up areas. It is therefore desirable to consider a solution alternative route through mass comfortable road.

Environmental condition of the citizens concerned
One of the important factors influencing the need of construction of the structure is the justification thereof from the viewpoint of affected inhabitants, and with regard to the position of the highway, the proposed highways will significantly improve the traffic situation in Bratislava and affected municipalities and the corresponding positive aspects. This includes the elimination of negative impacts of traffic on inhabitants - especially noise, vibrations, and accident rates.

Noise and Vibrations from Traffic
Anticipated noise and vibration exposure of population in the event of non-implementation of the designed road will definitely multiply due to the impact of the increased traffic on existing roads, while noise and vibration protection measures are virtually insoluble problem given the land use conditions.
To eliminate noise from the current traffic, noise reducing measures by building noise barriers must be introduced, which impinge on the space-related issue. Another possibility is to implement secondary anti-noise measures by the form of the reinforcement of the circumferential jacket of the objects by the embedding of acoustic windows with façade venting sound-insulating grill.

Safety of Traffic, Accident Rate
With an increasing traffic intensity on the affected road network, growth of accident rates is expected not only on the roads but also in urbanized areas of the affected municipalities with intense movements of pedestrians and traffic servicing existing facilities.

VI. ACCORD OF THE ACTIVITY WITH URBAN PLANNING DOCUMENTATION

The given construction of D4 highway is in accordance with the development strategy of Slovakia. The accord with international contracts and other documents the Slovak Republic is bound with is being assured by the Ministry of Transport, Construction and Regional Development of the Slovak Republic (hereinafter referred to as the MDVRR SR).

The given construction of D4 highway is in accord with the concept of the territorial development of Slovakia (KURS) and with the concept of development of road and highway network of the Slovak Republic.

Conditions of land-use planning documentation

- ***LUP of Bratislava Self-Governing Region (July 2008, in aggregate wording of changes and amendments 2000,2002,1/2003, 1/2005, General binding regulation of Bratislava Self-Governing Region No. 20/2008)***

Construction of D4 highway is in accordance with LUP of Bratislava Self-Governing Region - ÚPN VÚC BSK – reserve the prospective corridor for D4 highway around Bratislava from the junction D2 with D4 in Bratislava - city district Jarovce and further in the direction New Bridge across the Danube, Rovinka, Most pri Bratislave, Ivanka pri Dunaji, eastwards from Bratislava - city district Vajnory along Šúrsky kanál (channel), tunnel under the Carpathians, Marianka, link to the road I/2; continue with construction proposal from road I/2 towards D2 highway southwards from Stupava and towards road II/505 and further continue in prospect to Bratislava - city district Devínska Nová Ves in parallel with railway line to the state border with Austria and with construction of the new bridge over the Morava river and border crossing. Currently the concept of the Land-use plan of Bratislava Self-Governing Region is being elaborated (discussion on the concept took place from 2 April 2012 till 31 May 2012).

- ***LUP of the capital city of the Slovak Republic Bratislava (31 May 2007), Changes and amendments 01 (15 January 2009), Changes and amendments 02 (1 February 2012)***

Land-use plan of the Capital City of SR Bratislava – approved on 31 5. 2007 by the Resolution of the City Council of the Capital City of the Slovak Republic Bratislava No. 123/2007 and its binding part was declared as the generally binding Regulation of the Capital City of the Slovak Republic Bratislava No. 4/2007. It is a fundamental programme document, by which targets of the land-use planning in the territory of the capital city are fulfilled.

By resolution of the City Council of the Capital City of the Slovak Republic Bratislava No. 600/2008 dated 15 12. 2008 land-use planning documentation was approved Land Use Plan of the Capital City of the Slovak Republic, Bratislava, changes and amendments 01. The binding part of Land Use Plan of the Capital City of the Slovak Republic Bratislava, amendment 01 was declared as the generally binding Regulation of the Capital City of the Slovak Republic Bratislava No.12/2008 dated 15 12. 2008, which became effective on 15 1. 2009.

By resolution of the City Council of the Capital City of the Slovak Republic Bratislava No. 400/2011 dated 15 12. 2011 land-use planning documentation was approved Land Use Plan of the Capital City of the Slovak Republic, Bratislava, changes and amendments 02. The binding part of Land Use Plan of the Capital City of the Slovak Republic Bratislava, amendment 02 was declared as the generally binding Regulation of the Capital City of the Slovak Republic Bratislava No.17/2011 dated 15 12. 2011, which became effective on 1 2. 2012.

Construction of D4 highway is in accordance with the conditions of the land-use planning documentation - zero radial road running from the highway interchange D2/D4 in Jarovce municipality, through a new bridge over the Danube, along the southern and eastern boundaries of the city up to D1 highway and continuing on Račianska radial road, including flyover interchanges (III/00246, I/2, extended Bajkalská, I/63, II/572, I/61, D1, III/0611, II/502).

Positioning of D4 highway is not quite in accordance with its graphical parts, thus the change of the LUP of the capital city of the Slovak republic Bratislava is required. These are the following changes:

1. In the area highway D4 crossing the Danube, where pursuant to recommendation of the Ministry of Environment of the Slovak Republic (EIA of 28 September 2011) D4 highway on the right bank of the Danube bypasses the protected territory of the Nature Reserve Dunajské ostrovy in Protected Landscape Area Dunajské Luhy, where at the same time it is the protected area of European importance SKÚEV 0269

Ostrovné lúčky (NATURA 2000). Dunajské luhy is at the same time also an internationally important wetland territory – Ramsar location Dunajské luhy and a part of Emerald network. On the left bank of the Danube it bypasses the protected area of the Gajc Nature Reserve in the Protected Landscape Area Dunajské Luhy, which is at the same time a protected area of European importance SKÚEV 0295 Biskupické Luhy (NATURA 2000),

2. In the area of crossing the expressway R7 Bratislava, Ketelec – Dunajská Lužná due to respecting the protected areas of the Nature Reserves stated in point 1 and due to respecting the shifted route of R7 expressway farther from CHKO Dunajské luhy, SKCHVU Dunajské luhy, SKUEV Biskupické luhy, NRBC Bratislavské luhy in accordance with the recommendation of the Final opinion of the Ministry of Environment of the Slovak Republic (Number: 5461/07-7.3/ml) of 9 June 2009 on R7,
3. Smaller change in location of D4 highway close to the mining area "Podunajské Biskupice", which resulted from the need of respecting the new locations of D4 highway and R7 expressway at the point of FOI "Ketelec" while observing the required parameters on D4 highway,
4. Smaller change in location of D4 highway at the area of FOI "Rovinka“ due to the need of respecting the existing overhead electric lines ZNV 400 kV and VVN 110 kV,
5. Smaller change in location of D4 highway at the area of crossing the r.II/572 west of the village Most pri Bratislave due to the need of respecting the protective zones VPD 13-31 of airport of M.R.Štefánik,
6. Specification of the location of D4 highway behind the Small Danube due to bypassing water areas of Zelená voda,
7. Specification of D4 highway west of the village Ivanka pri Dunaji due to the need of respecting the protective zones VPD 04-22 and racon of the airport of M.R.Štefánik,
8. Specification of the location of D4 highway between FOI "Ivanka-West“ and FOI "Ivanka-North“ due to respecting the point 7 and bypassing the Lysec pond and its riperial vegetation in the follow-up section of "Highway D4 Bratislava, Ivanka North – Rača“, in accordance with recommendations of the Final opinion of the Ministry of Environment of the Slovak Republic (EIA) dated 7 February 2012 on Highway D4, Ivanka north – Záhorská Bystrica.

- ***LUP-O Most pri Bratislave (2002 including its changes and amendments 2002-2010)***

In LUP-O "zero circuit“ in category D 26.5/100 is proposed, which runs west of the village, in the location of current junction of r. II/572 with r. III/06359. Proposed positioning of D4 highway is not quite in accordance with its graphical parts, thus the change of the LUP-O Most pri Bratislave is required. Positioning of D4 highway was specified in LUPD of the respective construction in accordance with the Final opinion on Highway D4 Jarovce - Ivanka North, issued by the Ministry of Environment of the Slovak Republic on 28 September 2011, as well as due to the need of respecting the applicable protective zones of the airport of M.R.Štefánik.

- ***LUP CA of the village Ivanka pri Dunaji (Changes and amendments No. 06/2006)***

LUP CA reserves a corridor for the route of so-called zero traffic circuit around Bratislava (utility construction arising out of the position of the self-governing-region) in the area between the airport and Šúrsky kanál (channel). Zero circuit runs in it as an expressway. Small change in the location of D4 highway in the area of racon of the airport of M.R.Štefánik and solution of FOI "Ivanka-North" at the road I/61 in LUPD of the relevant construction was necessary due to the need of respecting the protective zones of this racon. Specified location of D4 highway, category of D4 highway, FOI "Ivanka-West" and FOI "Ivanka-North" should be reflected in the Changes and amendments of LUP CA Ivanka pri Dunaji. Positioning of D4 highway was specified in LUPD of the respective construction in accordance with the Final opinion on Highway D4 Jarovce - Ivanka North, issued by the Ministry of Environment of the Slovak Republic on 28 September 2011, as well as due to the need of respecting the applicable protective zones of the airport of M.R.Štefánik.

VII. PROBABLE IMPACT ON TERRITORIES

Section D4 Jarovce – Ivanka North directly runs through the large protected CHKO Dunajské luhy, in the close surroundings of the planned D4 highway there are smaller protected territories Dunajské ostrovy Nature Reserve,

Gajc Nature Reserve, Kopáčsky ostrov Nature Reserve. Out of the territories belonging to the Natura 2000 system D4 highway passes directly SKCHVU007 Dunajské luhy and SKUEV 0295 Biskupické luhy, in the close surroundings there are SKCHVU029 Sysľovské polia, SKUEV0269 Ostrovné lúčky. Dunajské luhy is at the same time the Ramsar location.

Most Significant Impacts of the Activity on Environment Component and Measures for their Reduction or Elimination

Impacts on air pollution

Air pollution due to car traffic has a negative impact on the overall condition of the environment. During the road operation a part of air pollution from transport shall be shifted from the current road network, which leads through the urban area to the area which has not been attacked by direct adverse impact of transport. This means distribution of pollution to bigger territory.

In addition to harmful substances in the exhaust gases and road vehicles the air pollution involves also the increased dust caused by turbulence of particles on the road surface and in its immediate vicinity. Such effects will be felt mainly during the construction.

Noise

Diversion of substantial part of traffic from current road network to D4 highway will have a positive impact on reduction of emissions and noise from traffic in the territory, where permitted noise limits are already now exceeded. At the same time noise production shall be shifted to location, where this phenomenon has not occurred so far. To protect avifauna (noise protection, protection in case of flight over the highway) barriers shall be constructed.

Based on the results of noise study noise control measures and noise barriers against birds were proposed in following locations:

261 Noise barrier at 0.010 - 0.295 km D4 on the right
262 Noise barrier at 0.417 - 2.025 km D4 on the right
263 Noise barrier at 0.000 – 0.265 km of branch "JA 2" on the right, in junction "Jarovce"
264-01 Bird barriers in 2.609 – 5,516 km D4 on the left
264-02 Bird barriers in 2.609 – 5,516 km D4 on the right
265 Noise barrier at 9.500 - 10.565 km D4 on the right
266 Noise barrier at 0.000 – 0.270 km of branch "PR" on the right, in junction "Rovinka"
267 Noise barrier at 10.660 - 10.760 km of D4 on the right
268 Noise barrier at 10.745 - 10.848 km of D4 on the right collector
269-01 Noise barrier at 10.871 - 11.000 km of D4 on the right collector
269-02 Noise barrier at 11.000 - 11.050 km of D4 on the right collector
270 Noise barrier at 0.575 - 0.780 km of road I/63 on the left
271 Noise barrier in 0.032 – 0.369 km of branch "RI" on the right, in the junction "Rovinka"
272 Noise barrier at 11.133 - 10.339 km D4 on the right
273 Noise barrier at 11.306 - 11.975 km D4 on the right
274 Noise barrier at 14.700 - 16.380 km D4 on the right
275 Noise barrier at 18.630 - 21.251 km D4 on the right
276 Noise barrier at 0.187 - 0.386 km on the right collector, in the junction "Ivanka - West"
277 Noise barrier at 0.00 - 0.200 km of branch "Jarovce - Senec", in the junction "Ivanka - West"
278 Noise barrier at 0.457 - 0.695 km on the right collector, in the junction "Ivanka - West"
279 Noise barrier at 0.345 - 0.908 km of branch "Jarovce - BA", in the junction "Ivanka - North"
280 Noise barrier at 0.000 - 0.198 km of branch "TT - Jarovce", in the junction "Ivanka - North"
281 Noise barrier at 0.000 - 0.378 km of branch "TT - Stupava", in the junction "Ivanka - North"
282 Noise barrier at 0.280- 0.680 km of branch "TT - Jarovce", in the junction "Ivanka - North"
283 Noise barrier at 0.000 - 0.749 km of branch "Stupava - BA", in the junction "Ivanka - North"
286 Façade adjustments in Jarovce at 0.200 - 1.700 km of D4 on the right
287 Façade adjustments in Rovinka at 10.855 km of D4 on the right

Impacts on nature and landscape

Impacts on habitat will be reflected most significantly in particular in places of transit through big-area protected CHKO Dunajské Luhy, which in the affected territory belongs to the system Natura 2000 SKCHVU007 Dunajské luhy and SKUEV 0295 Biskupické luhy and Dunajské luhy are at the same time the Ramsar location.

Impacts are visible by the following:

- direct disposal of habitats,
- interference with and influencing the habitat functions
- creating or strengthening barriers in migration corridor,
- impact of noise, emissions and spreading on habitats near the highway.

The project documentation of LUPD includes annexes Stocktaking and Social Evaluation of Woods, and Stocktaking and Social Evaluation of Habitats of Community and National Importance (both prepared by Zvědelík 2013).

Research of habitats on the route of D4 highway Jarovce - Ivanka North and on the route of all objects relating to the highway was performed in October 2013. Habitats on access roads and other objects, including interference in water streams, are mentioned in the closest highway stationing. Within the research the habitats of European importance have been identified only in one location. These are the following habitats:
Ls1.1 Willow-poplar lowland riparian forests - priority habitat of European importance,
Ls1.1 Oak-elm-ash lowland riparian forests - priority habitat of European importance,
- Vo2 Natural eutrophic and mesotrophic dead waters with vegetation of floating and/or immersed vascular plants of Magnopotamion or Hydrocharition type - habitat of European importance.

Habitat of European importance Ls1.1 Willow-poplar lowland riparian forests - priority habitat of European importance, occurs in 2.3 - 2.7 km, 3.1 km, 3.4 – 3.5 km, 3.7 – 4.0 km, 4.2 – 5.5 km, 16.6 – 16.8 km, 17.2 – 17.3 km.
Habitat of European importance Ls1.1 Oak-elm-ash lowland riparian forests - habitat of European importance, occurs in 3.1 - 3.4 km, 4.6 – 5.3 km, 19.0 – 19.1 km, 21.3 – 21.4 km
Habitat of European importance Vo2 Natural eutrophic and mesotrophic dead waters with vegetation of floating and/or immersed vascular plants of Magnopotamion or Hydrocharition type - habitat of European importance, occurs in 4.0 km 4.2 - 6.2 km (watercourse flow of Biskupické rameno).

To intervene in habitat of European or national importance it is required to acquire the consent of the nature protection authority.

Based on conclusions of the Inventory and social assessment of trees growing outside forest on the route of projected construction, there are trees in total of 83 locations. It is a vegetation of trees in the surroundings of the Danube, channels and arms, riparian overgrowth, accompanying vegetation of field roads, 1st class roads, highways, railways, scattered landscaping greenery in agricultural landscape, groves, gardens. Many times it is a dense vegetation with a character of forest outside FLU. During stocktaking a total of 7780 pcs of trees and 68,427 m^2 of bush vegetation was recorded in all locations. Out of that amount the consent of the nature protection authority felling refers to 6,682 pcs. of trees and total stock-taken area of bushes, i.e. 68,427 m^2. Computed community value of trees represents a sum of EUR 10,187,087.62.

Impacts on surface water and groundwater

Construction and operation of the highway may affect the quality of surface water and groundwater and their regime. In terms of quality, the water contamination by oil products is most likely due to disorders and accidents of mechanisms.
Based on hydrogeological research, elaborated by Vodné zdroje Slovakia, s. r. o. (2013), there are water areas in the surrounding of the highway route D4 Bratislava Jarovce - Ivanka North, which are represented by dead arms of the Danube and artificial material gravel pits. Dead oxbow lakes are nowadays mostly separated from the main stream, while their water regime is heavily affected by the construction and operation of the water diversion system Gabčíkovo.

Hydrogeological expert opinion is focused on assessment of the impact of construction and operation of the proposed activity of D4 highway Bratislava Jarovce - Ivanka North on utilised water sources Rusovce well and Rusovce Ostrovné lúčky - Mokraď (Wetland) and assessment of the impact of soakage of waste water from surface drain of D4 highway and surface water in adjacent territory. Based on the results of evaluations stated in

hydrogeological expert opinion, as well as hydro-technical calculations, rainwater can be drained from the highway surface drainage based on the designed proposal.
Drainage of D4 highway track is ensured by its transverse and longitudinal inclination. There is a proposal of system of drainage without sewage and without ORL, i.e. seepage to ditches and infiltration lakes on D4 highway. Infiltration drains with the depth of 1.00 m will be a part of the ditch in little permeable rocks. Drains will be filled with permeable material (gravel-sand, grit), so that infiltration of rainwater is ensured. Drain surface will be filled with humus and grassed due to prevention of seepage of insoluble substances. These substance are kept in the upper part of humus layer, usually in depth within 3 cm. There will be small dams in ditches, based on longitudinal inclination due to slowing down and retention of water in places where water falls. Ditches mouth into seepage - evaporating lakes (dry), which will capture remaining rainwater in case of excess rain. Calculation of capacity of infiltration lakes is based on ČSN 75 9010. Evaporation will be facilitated by hydrophilic trees, such as willows, poplars, i.e. trees that are able to consume a big amount of water by its roots. Bottom of lakes will consist of sand with thickness of 20 cm, in which hydrophilic plants able to capture oil substances (cane) will be planted. Clay filtration layer with geotextile will be spread under the sand layer, which will capture insoluble oil substances to prevent them from infiltrating the groundwater. Clay layer will have to be changed every 15 - 20 years. Gravel-sand reservoir, proposed below the clay layer, will fasten water infiltration. Bottom of the lake should be at least 1 m above maximum level of Q100. Should the height given not be fulfilled, geotextile shall be placed on the lake bottom, which will help clean the infiltrating water.
Lakes are proposed on D4 highway as follows:

- in the area of FOI Ketelec (lake J1 – J5)
- in 7.300 km of D4 on the left (J6 lake)
- in 8.400 km of D4 on the left (at the service area J7 plane)
- in 8.950 km of D4 on the left (at the service area J8 plane)
- in 9.200 km of D4 on the right (at the service area J9 plane)
- in the area of FOI Rovinka (J10 – J13 lake)
- in 11.250 km of D4 on the right (J14 lake)

Before, during construction and operation of D4 highway monitoring of surface water, waste water and groundwater based on individual monitoring project shall take place, which is a part of the project documentation.

Impacts on soil
Due to highway construction agricultural land, forest land and permanent grassland shall be taken, organisation of soil shall be disturbed (division of stretches of land, disconnection of existing field roads, etc.), soil erosion and contamination may be impacted, as well as agricultural cultures along the highway.
Agricultural land protection during construction must be ensured mainly by minimizing use for handling belts, construction yards and temporary material stock piles. Prevention of soil contamination by oil from construction mechanisms can only be ensured by consistent maintenance of construction equipment in order to prevent leakage to the ground. Construction yards must be situated on paved surfaces. Basic measure to protect agricultural lands is to carry out removal of humus overburden of agricultural land in terms of the methodological guideline of the Ministry of Agriculture no. 2341/2006-910.

VIII. COMPENSATORY MEASURES

In accordance with provisions of the Final opinion for the section of D4 highway Bratislava, Jarovce - Ivanka North, enacted by Act No. 24/2006 Coll. on impact assessment on environment, as amended, project of compensatory measures was elaborated.

The project of compensatory measures was elaborated based on the Proposal of the project of compensatory measures (HBH Projekt, s. r. o., December 2011), which was subsequently discussed, commented and appropriate compensatory measures taken. Thus defined compensatory measures **were preliminary approved by the Ministry of Environment of the Slovak Republic regarding the way and conditions of execution of compensatory measures of the activity proposed "Highway D4 Jarovce – Ivanka North“ by letter No. 4461/2012-2.1.**
This decision defined the range and conditions of further preparation of the project of compensatory measures for the intention of D4 Bratislava - Ivanka North within preparation of project documentation of LUPD.

Project of compensatory measures describes targets of compensations, as well as the way to their implementation, so that to maximum extent they eliminate and compensate the negative impact of D4 highway Bratislava, Jarovce – Ivanka North on three species of birds, namely black kite (*Milvus migrans*), white-tailed eagle (*Haliaeetus albicilla*) and black stork (*Ciconia nigra*), which are the subjects of protection in SKCHVU007 Dunajské luhy (belonging to the system Natura 2000), so that favourable state for their occurrence and reproduction within the mentioned territory of the system Natura 2000 is ensured.

Compensatory measure 1, change of lands to a forest plot in the cadastral territory of Rusovce

It will ensure a change of the plot type on parcel No. 1313/1 in cadastral area Rusovce to a forest plot with subsequent afforestation of this plot aimed at creating new forest stand. Execution of this project will ensure professional economy in created forest stand, by which the target of creating sustainable forest stand is fulfilled together with required ecological function of nesting habitat, in particular white-tailed eagle, which has recently nested in this location.

Compensatory measure 2, change of lands to a forest plot in the cadastral territory of Čunovo

It will ensure a change of plot type on parcels No. 1446, 1450, 1451, 1452, 1453, 1454, 1455, 1456, 1457, 1458, 1459, 1460, 1461, 1462, 1463, 1464/1, 1464/2, 1464/3, 1465, 1466, 1467, 1468, 1469, 1470, 1471, 1472, 1473, 1474, 1475, 1476, 1477, 1478, 1479, 1480, 1481, 1482, 1483, 1484, 1485, 1491, 1492, 1493, 1494, 1495, 1496, 1497, 1498, 1499, 1500, 1501, 1502, 1503, 1504, 1505, 1506 and 1507 in the cadastral area Čunovo, to forest plot with subsequent afforestation of this plot with the aim to create a new forest stand. Similar to SO 071, execution of this project will ensure professional economy in created forest stand, by which the target of creating sustainable forest stand is fulfilled together with required ecological function of nesting habitat, in particular white-tailed eagle, which has recently nested in this location.

Compensatory measure 3, change of lands to a forest plot in the cadastral territory of Čunovo

It will ensure a change of the plot type on parcels No. 1540 and 1541/1 in cadastral area Čunovo to a forest plot with subsequent afforestation of this plot aimed at creating a new forest stand. Similar to SO 071 and SO 072, execution of this project will ensure a professional economy in created forest stand, by which the target of creating a sustainable forest stand is fulfilled together with required ecological function of nesting habitat, in particular white-tailed eagle, which has recently nested in this location.

Compensatory measure 4, grassing of plots in cadastral area of Podunajské Biskupice

It will ensure grassing of land on plot No. 5888 in cadastral area of Podunajské Biskupice with the aim to create a permanent grassland, in the second step also a change of the plot type to permanent grassland. Grassing will mean fulfilment of targets, namely creating a permanent grassland of good quality and required ecological function as food habitat for birds.

Compensatory measure 5, grassing of plots in cadastral area of Kalinkovo

It will ensure grassing of plot on parcels No. 1099/3, 1099/6, 1099/9 and 1099/10 in cadastral area Kalinkovo with the aim to create a permanent grassland. Grassing will mean fulfilment of targets, namely creating a grassland of good quality and required ecological function as food habitat for birds. Localisation and scope of the object is described more in detail in part M. Compensatory measures.

Compensatory measure 6, watercourse flow of Biskupické rameno

Project of watercourse flow of Biskupické rameno is to return water regime to the state before construction of Gabčíkovo dam to maximum extent , so that in doing so, water from the Danube can be supplied to further network of old Danube arms, which were disconnected from supply of the Danube water and subsequently drained. After "revitalisation" the arm will represent a watercourse with full flow, connected to the main course of the Danube, thus ensuring also its migration connection to this large stream, which will improve not only diversity

of fish in Biskupické rameno, but also its number. Therefore Biskupické rameno will represent a better food habitat for affected bird species compared to the current state.

Compensatory measure 6, bridge on forest road above Biskupické rameno

It will be constructed for needs of watercourse flow of Biskupické rameno. Within this construction the old water-supply object, functioning as a bridge across the Biskupické rameno on the forest road, will substitute a new frame bridge with convenient migration parameters for fish and other water animals, such as otter etc.

IX. COMPARISON OF DESIGN ALTERNATIVES

Differences between the alternative recommended by the final opinion of the Ministry of Environment of the Slovak Republic and designed solution resulted from the change of spatial position of the highway route. Compared to EIA following changes occurred in LUPD:

- changes in location of *highway D4*
- changes in *interchanges*
- changes in relocations and reconstructions of roads,
- the objects of relocations and reconstructions of roads, proposed within DZP, which were not mentioned in the Evaluation report (EIA),
- changes in bridge structures,
- changes in service areas,
- changes in relocations of utilities, resulting from a detailed geodetic survey, comments of network administrators and coordination with other structures of the relevant construction,
- changes arising from the implementation of compensatory measures
- changes in the scope and location of noise barriers and further noise control measures

All the changes took place in the process of the preparation of project documentation for the construction as the result of the optimisation of the route on the basis of the conditions of representatives of concerned villages, authorities and professional organisations, authorized to express themselves to the technical solution of the proposed construction. Changes mentioned in the position of the highway resulted in changes of detailed solution of other bridge objects, relocations and reconstruction of roads, relocations and reconstruction of water streams, relocations of utilities and in the range of noise control measures.

The route of the projected highway is run in the corridor of an option, which was recommended by the Final opinion of Ministry of Environment of the SR of 28 September 2011. Thus, the change in the proposed activity does not represent a principle change of the design. The most important changes are as follows:

- Change of location of D4 highway in the area of crossing the expressway R7 Bratislava, Ketelec – Dunajská Lužná due to respecting the protected areas of the Nature Reserves and due to respecting the shifted route of R7 expressway farther from CHKO Dunajské luhy, SKCHVU Dunajské luhy, SKUEV Biskupické luhy, NRBC Bratislavské luhy in accordance with the recommendation of the Final opinion of the Ministry of Environment of the Slovak Republic (Number: 5461/07-7.3/ml) of 9 June 2009 on R7,
- Specification of the location of D4 highway behind the Small Danube due to bypassing water areas of Zelená voda.
- Specification of the location of D4 highway between FOI "Ivanka-West“ and FOI "Ivanka-North“ due to respecting the point 7 and bypassing the Lysec pond and its riperial vegetation in the follow-up section of "Highway D4 Bratislava, Ivanka North – Rača“, in accordance with recommendations of the Final opinion of the Ministry of Environment of the Slovak Republic (EIA) dated 7 February 2012 on Highway D4, Ivanka north – Záhorská Bystrica.
- Implementation of compensatory measures aimed at elimination and compensation of negative impact of D4 Bratislava, Jarovce – Ivanka North on thee species of birds, namely black kite (*Milvus migrans*), white-tailed eagle (*Haliaeetus albicilla*) and black stork (*Ciconia nigra*), which are the subjects of protection in SKCHVU007 Dunajské luhy (belonging to the system Natura 2000), so that favourable

state for their occurrence and reproduction within the mentioned territory of the system Natura 2000 is ensured.

Changes in proposed activity can be viewed positively, as it will improve traffic conditions in the area and significantly increase traffic and population safety. The positive aspects of the proposed activity will be felt mostly by inhabitants of villages through which the whole transit traffic passes. Implementation of compensatory measures will ensure a favourable state of criteria species of birds in SKCHVU007 Dunajské luhy, belonging to Natura 2000 network.

The negative impact of the operation on inhabitants is indirect by means of air pollution and noise from cars. Observance of noise load limit values shall be insured by construction of noise barriers. Management of waste from the operation of the highway will be ensured by the highway administrator in cooperation with operators of waste recovery and disposal facilities on a contract basis.

The structure will be built under the construction permit. The permit will reflect all conditions for construction so as to meet all applicable legislative conditions aimed at eliminating negative impacts on the residents.

In Bratislava, March 2014 Handled by: Ing. Ján Longa

Disclaimer

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The name of this document in Slovak is *Netechnické zhrnutie*. The file name has not been changed.

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