

A. BASIC INFORMATION

I. BASIC INFORMATION ON CLAIMANT

I.1. NAME

Národná diaľničná spoločnosť, a.s. Bratislava

I.2. ID NO.

35 919 001

I.3. REGISTERED OFFICE

Mlynské Nivy 45, 821 09 Bratislava

I.4. AUTHORIZED REPRESENTATIVE OF THE CLAIMANT

Ing. Juraj Čermák, CSc. - Chief Investment Officer

I.5. PERSON AUTHORIZED TO PROVIDE RELEVANT INFORMATION ON THE PROPOSED ACTIVITY:

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Ing. Marián Linduška

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Ing. Ján Longa (Chief Investigator of the Evaluation Report)

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II. BASIC INFORMATION ON THE PROPOSED ACTIVITY

II.1. NAME

R7 Expressway Dunajská Lužná - Holice

II.2. PURPOSE

The purpose of construction of the R7 expressway is to ensure fluent and safe road transport on the concerned road network and to reduce negative impacts due to road transport on environment of the concerned municipalities. The R7 expressway is a part of the basic system of highways and expressways. The construction in question shall improve conditions for international and inland transit transport, allow for west – east interconnection and increase fluency, speed, and safety of all participants of the road traffic.

The purpose of the environmental impact assessment pursuant to Act No. 24/2006 Coll. on Environment Impact Assessment and on amendment of certain acts is to provide information on the proposed activity in the information evaluation report, on the state of environment of the area in which the proposed activity is to be implemented, on the assumed impacts of the proposed activity on environment and on proposals of measures for their exclusion, reduction, or compensation.

II.3. USER

Traffic public

Administrator: Národná diaľničná spoločnosť, a.s., Mlynské Nivy 45, 821 09 Bratislava

II.4. LOCATION OF THE PROPOSED ACTIVITY

Region: Bratislava and Trnava

District: Senec and Dunajská Streda

Cadastral areas of municipalities: Dunajská Lužná, Kvetoslavov, Báč, Rohovce, Trnávka, Macov, Blatná na Ostrove, Holice and of the town of Šamorín

II.5. GENERAL SITUATION OF THE PROPOSED ACTIVITY (see the general situation)

II.6. REASON FOR LOCATION IN THE RESPECTIVE LOCALITY

The reason for location of the proposed activity in the respective locality is diversion of transport outside the built-up area of towns and municipalities, removal of sections with unsatisfactory technical parameters, increase of fluency and safety of transport and improvement of environment for inhabitants in

the concerned settlements. The position of the expressway variant solutions is determined by the morphology of the ground, transport requirements in relation to the existing communication system and built-up area and the requirements of land-planning documentations.

II.7. COMMENCEMENT AND TERMINATION DATE OF CONSTRUCTION AND OPERATION OF THE PROPOSED ACTIVITY

Construction commencement – 2014
 Construction termination – 2017

II.8. BRIEF DESCRIPTION OF THE TECHNICAL AND TECHNOLOGICAL SOLUTION

At the beginning of works, there were three variants proposed in the technical study (Dopravoprojekt a.s. 2005): **A variant blue, B variant red and E variant violet.**

Based on the submitted plan, the Ministry of Environment of the Slovak Republic determined apart from the zero variant also A, B and E variant solutions in the issued range of evaluation for detail assessment in the evaluation report.

The basic characteristics and parameters of the studied variants

The technical study defines the commencement of variants of the R7 expressway section to be addressed in the elevated junction Dunajská Lužná. The end of the section is in place of the I/63 road crossing near the municipality of Holice. The route of the R7 expressway continues east from the municipality of Holice via connecting section of the R7 expressway Holice - Dunajská Streda.

Basic information on the proposed variants

| INDICATOR | VARIANT | | |
|--|----------------------------|----------------------------|----------------------------|
| | <i>A blue</i> | <i>B red</i> | <i>E violet</i> |
| Total route length (km) | 17.593 (23.250 from D4) | 18.042 (24.800 from D4) | 17.121 (23.879 from D4) |
| Number of interchanges (pcs) | 3 | 3 | 3 |
| Anti-noise screens (m) | 2,130 | 4,600 | 1,350 |
| Permanent land use (m ²) | 800,861.00 | 888,860.00 | 779,030.00 |
| Temporary land use (m ²) | 266,295.00 | 320,180.00 | 258,820.00 |
| Permanent use of agricultural land (m ²) | 644,773.00 | 747,980.00 | 684,620.00 |
| Temporary use of agricultural land (m ²) | 175,535.00 | 229,840.00 | 166,840.00 |

| | | | |
|--|-----------|------------|-----------|
| Permanent use of vineyards (m ²) | 52,600.00 | 29,720.00 | 9,300.00 |
| Temporary use of vineyards (m ²) | 12,030.00 | 12,960.00 | 4,200.00 |
| Permanent forest use (m ²) | 4,380.00 | 2,150.00 | 4,380.00 |
| Temporary forest use (m ²) | 1,240.00 | 950.00 | 4,860.00 |
| Permanent use of other areas (m ²) | 99,108.00 | 109,010.00 | 80,730.00 |
| Temporary use of other areas (m ²) | 77,490.00 | 76,430.00 | 82,920.00 |

Comparison of the proposed components of the R7 expressway and standard ones

| TYPE OF COMPONENT | STN 736101 | variant A blue | variant B red | variant E violet |
|--|-----------------------|---------------------------|--------------------------|-----------------------------|
| <i>Horizontal alignment of the route</i> | | | | |
| Min. semi-diameter of the direction curve (m) | 725 | 6,500 | 2,200 | 9,500 |
| Minimum distance of interchanges (km) | 5 | 5.455 | 4.981 | 5.032 |
| <i>Vertical alignment of the route</i> | | | | |
| Min. semi-diameters of vertical curves - summit ones (m) | 11,000 | 150,000 | 35,000 | 150,000 |
| Min. semi-diameters of vertical curves - sag ones (m) | 5,000 | 150,000 | 100,000 | 50,000 |
| Max. longitudinal slope (%) | 3.50% | 0.2% | 0.3% | 0.38% |
| Min. resulting slope (%) | 0.50% | 2.5% | 0.3% | 2.5% |

Exceptions from STN

In B variant, the proposed solution requires granting an exception from STN 73 6101 Art. 6.9.1 regarding minimum resulting slope.

In places with zero crossfall (area of the road cross tipping) a minimum resulting slope of 0.3% is ensured instead of the prescribed value of 0.5% due to route leading in the flat country where observation of the prescribed value would result in increase of earthwork volume by increase of embankments and the need of multiple breaking of the level what would adversely impact the route aesthetics in the flat country. In the remaining sections where no road tipping occurs the minimum resulting slope is 2.5% - thus the condition required by the standard is met.

II.9 VARIANTS OF THE PROPOSED ACTIVITY

Technical description of variants

A VARIANT BLUE

The beginning of the section of the R7 expressway Dunajská Lužná - Holice is in the interchange of Dunajská Lužná in which the R7 expressway is connected to the I/63 road via the feeder. The R7 expressway route continues in the east direction north of the town of Šamorín, municipalities of Šamot, Trnávka and Blatná na Ostrove. The end of the R7 expressway section is near the municipality of Holice where the R7 expressway route is connected to the existing I/63 road. In the area north of the town of Šamorín it is possible to shift from A variant to B variant. Routing of A variant was influenced especially by the following factors:

- position of the "Rovinka" elevated junction at feed of the R7 expressway to the D4 highway,
- recreational area of the Rovinka lake and the Košariská lake,
- existing and planned built-up area of the adjacent municipalities and towns while securing sufficient distance from the built-up area,
- satisfactory parameters of the I/63 road led outside the urban area of municipalities in the section from the municipality of Holice towards Dunajská Streda,

Basic information on the section:

- | | |
|---|-----------------------|
| - category of the R7 expressway | R 25.5 / 120 |
| - route length | 17.593km |
| - directional semi-diameters | 14,000, 6,500, 6,500m |
| - transition curves of length | 500m |
| - longitudinal slopes | from 0% to 0.2% |
| - SSÚR (Expressway Management and Maintenance Centre) | Holice |

The following elevated junctions are designed on the R7 expressway:

- "Dunajská Lužná" including the feeder to the I/63 road
- "Šamorín" with the II/503 road
- "Holice" with the III/06323 road

Other roads are designed as fly-over solutions over the R7 expressway. A small "Macov" lay-by is considered on the border of the cadastral territories of Trnávka and Macov.

A parallel road is in the Dunajská Lužná – Holice section led along the existing I/63 road. Currently, the I/63 road is built in the category C 11.5/70 - 80. The I/63 road passes in the section to be addressed through the urban area of the municipality of Dunajská Lužná, the town of Šamorín, Báč and Blatná na Ostrove. Interchanges with IIIrd class roads and the II/506 road are designed as fly-over solutions. Horizontal and vertical conduct of the road complies with the needs of the parallel road. There are no point failures on the route. The parallel road shall comply with the assumed perspective traffic which after commissioning the R7 expressway on the I/63 road, compared to the present, is going to be significantly lower and fail to reach the standard values of admissible intensities for the respective road category of approx. 11,000 vehicles/24 h in the profile.

B VARIANT RED

B variant is led in the route pursuant to the Land-Use Plan of the Trnava HTU. The beginning of the R7 Dunajská Lužná - Holice expressway is in the interchange with the I/63 road (elevated junction of Dunajská Lužná), south-east of the municipality of Dunajská Lužná. The R7 expressway route continues in the east direction north of the town of Šamorín, between the settlements of Bučuháza and Šamot, south of the municipality of Trnávka and Blatná na Ostrove, with feeder to the existing I/63 road south of the municipality of Blatná na Ostrove. The end of the section is near the municipality of Holice.

Routing of the B variant was influenced especially by the following factors:

- position of the "Ketelec" elevated junction at feed of the R7 expressway to the D4 highway,
- PA Dunajské Luhy close to the "Ketelec" elevated junction,
- planned moto-cross and cyclo-cross path in the south-east part of the municipality of Dunajská Lužná,
- existing and planned built-up area of the adjacent municipalities and towns while securing sufficient distance from the built-up area,
- satisfactory parameters of the I/63 road led outside the urban area of municipalities in the section from the municipality of Blatná na Ostrove towards Dunajská Streda,

Basic information on the section:

- | | |
|---------------------------------|---|
| - category of the R7 expressway | R 25.5 / 120 |
| - route length | 18.042km |
| - directional semi-diameters | 5,000, 4,800, 8,000, 6,000, 4,500, 6,000, 5,000, 2,200m |
| - transition curves of length | 600, 500, 550, 200m |
| - longitudinal slopes | from 0% to 0.30 % |
| - SSÚR | Holice |

The following elevated junction are designed on the R7 expressway:

- "Dunajská Lužná" with the I/63 road
- "Šamorín" with the II/503 road
- "Holice" with the III/06323 road

Other roads are designed as fly-over solutions over the R7 expressway. A small "Rohovce" lay-by is designed on the border of the cadastral territories of Trnávka and Rohovce.

A parallel road is in the Dunajská Lužná – Holice section led along the existing I/63 road. Currently, the I/63 road is built in the category C 11.5/70 - 80. The I/63 road passes in the section to be addressed through the urban area of the municipality of Dunajská Lužná, the town of Šamorín, and Báč. From the turning to the municipality of Rohovce in km 19.150 up to the end of the section in the Holice interchange the parallel road would continue along the relaying of the III/06316 and III/06318 roads.

E VARIANT VIOLET

The beginning of the the R7 expressway Dunajská Lužná - Holice is in the interchange with the I/63 road (elevated junction of Dunajská Lužná), south-east of the municipality of Dunajská Lužná. The R7 expressway route continues north of the town of Šamorín, municipalities of Šamot, Trnávka, and Blatná na Ostrove. The end of the section is near the municipality of Holice.

Basic information on the section:

| | |
|---------------------------------|------------------------------|
| - category of the R7 expressway | R 2.,5 / 120 |
| - route length | 17.121km |
| - directional semi-diameters | 3,750, 4,000, 9,500, 20,000m |
| - transition curves of length | 230, 255, 600, 500m |
| - longitudinal slopes | from 0% to 0.38% |
| - SSUR | Holice |

The following elevated junction are designed on the R7 expressway:

- "Dunajská Lužná" with the I/63 road
- "Šamorín" with the II/503 road
- "Holice" with the III/06324 road

Other roads shall be designed as fly-over solutions over the R7 expressway. A small "Macov" lay-by is considered on the border of cadastral territories of Trnávka and Macov.

A parallel road is in the Dunajská Lužná – Holice section led along the existing I/63 road. Currently, the I/63 road is built in the category C 11.5/70 - 80. The I/63 road passes in the section to be addressed through the urban area of the municipality of Dunajská Lužná, the town of Šamorín, Báč and Blatná na Ostrove. Interchanges with IIIrd class roads and the II/506 road are designed as fly-over solutions. Horizontal and vertical conduct of the road complies with the needs of the parallel road. There are no point failures on the route. The parallel road shall comply with the assumed perspective traffic which after commissioning the R7 expressway on the I/63 road, compared to the present, is going to be significantly lower and fail to reach the standard values of admissible intensities for the respective road category of approx. 11,000 vehicles/24 h in the profile.

R7 expressway facilities

R7 expressway facilities consist mainly of:

- catching and guiding safety devices (guard fences, marker posts, tables, edge and reflective strips),
- vertical and horizontal traffic signs,
- expressway stationing,
- delimitation of the expressway land border,
- vegetation adjustments (bush and tree planting).

In compliance with the concept of layout and equipment of lay-bys on expressways in the Slovak Republic (11.2004) SSÚR is in the "Holice" interchange“proposed:

- in km 23.250 of A variant of the R7 expressway,
- in km 24.800 of B variant of the R7 expressway.

In the SSÚR area, there are areas considered for Traffic Inspectorate of the Police Corps of the Slovak Republic, for fire and rescue brigade and areas for NDS administration and maintenance with total size of approx. 4.5ha.

Bridges

Design of bridges stems from the horizontal and vertical conduct of the R7 expressway which is in the section to be addressed proposed in three variants (A, B, E). The definite category of **R expressway 25.5/120** is designed in the section to be addressed.

The design of bridges respects clearance gabarits of overbridged traffic routes according to STN 73 6201 and in case of overbridging water streams it is necessary to shift Q100 with the required reserve.

Bridges are proposed from common currently applied technologies from bar prefabricates through monolithic reinforced-concrete board structures to monolithic engineered structures from pre-stressed concrete built on the supporting ring or made by the technology of free cantilever concreting method. In case of smaller heights of bridges above the ground and suitable character of the country, it is possible to build bridges applying construction on the supporting ring.

From architectural point of view, it is suitable to finish the bridges located close to town districts by a shape of the load-bearing structure and by atypical armatures.

In case of bridges above water streams it is necessary to consider course adjustment in minimum extent including bottom and bank reinforcement according to the valid STN. It is necessary to reinforce the set-offs below the load-bearing structure according to STN (e.g. with paves) on bridges over the roads or on bridges over the R7 expressway.

Lengths of bridges are designed in a way so as their fields can respect the width arrangement of overbridged barriers and, subsequently, comply with other inevitable structural measures. Revision paths and passage heights on bridges and in underpasses meet the requirements of STN 73 6201. In order to optimize the proposal it is necessary to perform the detail geological survey of the concerned territory.

Bottom construction – edge supports are designed as reinforced concrete ground sills on piles or mass supports. Intermediate piles have various dimensions according to the type of load-bearing structure, there are round and holing props. The shapes of intermediate pillars shall be assessed on a case-to-case basis.

Pavements on bridges are considered according to STN 73 6201. Drainage of bridges is ensured by drainage troughs with discharge into the road drainage or with shorter bridges by water separators.

Other parts of the bridge such as bridge heads, bearings and accessories of bridges: angle slabs, catching safety devices etc. shall be designed on a standard level. Their shapes, dimensions and properties shall be dealt with in higher levels. The design of anti-corrosive protection of bridges shall be specified after implementation and evaluation of geophysical survey.

| <i>INDICATOR</i> | <i>VARIANT</i> | | |
|--|-----------------|-----------------|-----------------|
| | <i>A blue</i> | <i>B red</i> | <i>E violet</i> |
| Bridges of R7 expressway (m²): | 4,942.70 | 5,117.20 | 4,922.90 |
| Bridges on R7: | 0.00 | 0.00 | 0.00 |
| Bridges over R7: | 4,942.70 | 5,117.20 | 4,922.90 |
| Bridges outside R7: | 0.00 | 0.00 | 0.00 |
| Bridges of R7 expressway (m) | 582.00 | 602.00 | 579.00 |
| - up to 50m | 0.00 | 0.00 | 0.00 |
| - 50 to 100m | 582.00 | 602.00 | 579.00 |
| - over 100m | 0.00 | 0.00 | 0.00 |

Induced investments

| <i>INDICATOR</i> | <i>VARIANT</i> | | |
|---|----------------|--------------|-----------------|
| | <i>A blue</i> | <i>B red</i> | <i>E violet</i> |
| Relaying and reconstructions of other roads (m) | 5,800 | 9,330 | 5,990 |
| Temporary and access roads to the site (m) | 10,966 | 4,523 | 4,675 |
| Reclamation of deserted road sections (m ²) | 10,780 | 13,530 | 13,350 |
| Relaying of water conduits (m) | 0 | 270.00 | 0 |
| Relaying of heavy current lines (m) | 1,300.00 | 1,500.00 | 800.0 |
| Relaying of weak current lines (m) | 800.00 | 12,100.00 | 180.00 |
| Relaying of gas duct (m) | 80.00 | 100.00 | 230.00 |
| Demolition of fences | 0 | 700 | 800 |
| Number of buildings determined for liquidation (pcs) | 0 | 0 | 0 |
| Relaying of irrigation (m) | 1,900.00 | 1,500.00 | 1,900.00 |

II.10. TOTAL COSTS (INDICATIVE)

| Variant | A blue | B red | E violet |
|----------------|---------------|--------------|-----------------|
|----------------|---------------|--------------|-----------------|

| | | | |
|--|--|--|--|
| Total costs VAT excluded | 217,624,- thous. EUR 6,556,168,- thous. SKK | 201,733,- thous. EUR 6,077,444,- thous. SKK | 193,830,- thous. EUR 5,839,318,- thous. SKK |
| Costs per 1km of the expressway | 9,360,- thous. EUR 281,986,- thous. SKK | 8,134,- thous. EUR 245,058,- thous. SKK | 8,117,- thous. EUR 244,538,- thous. SKK |

Note: The costs for construction of individual variants of the R7 expressway are adopted from the technical study and calculated for the price level of y. 2009

II.11. MUNICIPALITY CONCERNED

Town of Šamorín
Municipality of Dunajská Lužná
Municipality of Kvetoslavov
Municipality of Báč
Municipality of Rohovce
Municipality of Trnávka
Municipality of Macov
Municipality of Blatná na Ostrove
Municipality of Holice

II.12. SELF-GOVERNING REGION CONCERNED

Bratislava and Trnava Self-Governing Region

II.13. BODIES CONCERNED

Pursuant to Act No. 24/2006 Coll. on Environmental Impact Assessment the body concerned is the public administration body the binding assessment, consent, opinion or expression of which issued according to the special regulations condition permission for the activity. In this regard these include:
the Ministry of Transport, Posts and Telecommunications of the Slovak Republic
the Ministry of Environment of the Slovak Republic
the Ministry of Defence of the Slovak Republic
Bratislava Self-Governing Region (BSK), Office of BSK, Prešov
Trnava Self-Governing Region (TTSK), Office of TTSK, Prešov

DOPRAVOPROJEKT, a.s.

Bratislava

Slovak Road Administration Bratislava
Regional Office of Environment Bratislava
Regional Office of Environment Trnava
Regional Land Registry Office Bratislava
Regional Land Registry Office Trnava
Regional Office for Road Traffic and Roads Bratislava
Regional Office for Road Traffic and Roads Trnava
Regional Forest Office Bratislava
Regional Forest Office Trnava
Regional Land Registry Office Bratislava
Regional Land Registry Office Trnava
Regional Monument Board Bratislava
Regional Monument Board Trnava
Regional Directorate of Police Corps Bratislava
Regional Directorate of Police Corps Trnava
Regional Directorate of Fire and Rescue Service Bratislava
Regional Directorate of Fire and Rescue Service Trnava
Regional Public Health Authority Bratislava
Regional Public Health Authority Dunajská Streda
Circuit Office for Road Traffic and Roads Senec
Circuit Office for Road Traffic and Roads Senec
Circuit Office of Environment Senec
Circuit Office of Environment Dunajská Streda
Circuit Land Registry Office Senec
Circuit Land Registry Office Dunajská Streda
Circuit Office of Crisis Management Senec
Circuit Office of Crisis Management Dunajská Streda
District Directorate of Fire and Rescue Service Šamorín
District Directorate of Fire and Rescue Service Dunajská Streda
Orange Slovensko, a.s. Bratislava
State Nature Conservancy of the Slovak Republic
Slovenský vodohospodársky podnik, š.p.,
Slovenský plynárenský priemysel, a.s. Bratislava
Západoslovenská energetika, a.s. Bratislava
T-com, a. s. Bratislava

Railway Regulatory Authority, Special Building Authority Section Bratislava

II.14. PERMITTING BODY

Pursuant to Act No. 24/2006 Coll. on Environmental Impact Assessment the permitting body is the municipality or a state administration body competent to issue decision on permission of the proposed activity according to special regulations. The permission for construction of the expressway section to be addressed is issued by:

- the Ministry of Transport, Posts and Telecommunications of the Slovak Republic
- Circuit Office for Road Traffic and Roads Senec
- Circuit Office for Road Traffic and Roads Dunajská Streda
- Circuit Office of Environment Senec
- Circuit Office of Environment Dunajská Streda
- Regional Public Health Authority
- Municipal Office of Šamorín
- Municipal Office of Dunajská Streda
- Municipal Office of Kvetoslavov
- Municipal Office of Báč
- Municipal Office of Rohovce
- Municipal Office of Trnávka
- Municipal Office of Macov
- Municipal Office of Blatná na Ostrove
- Municipal Office of Holice

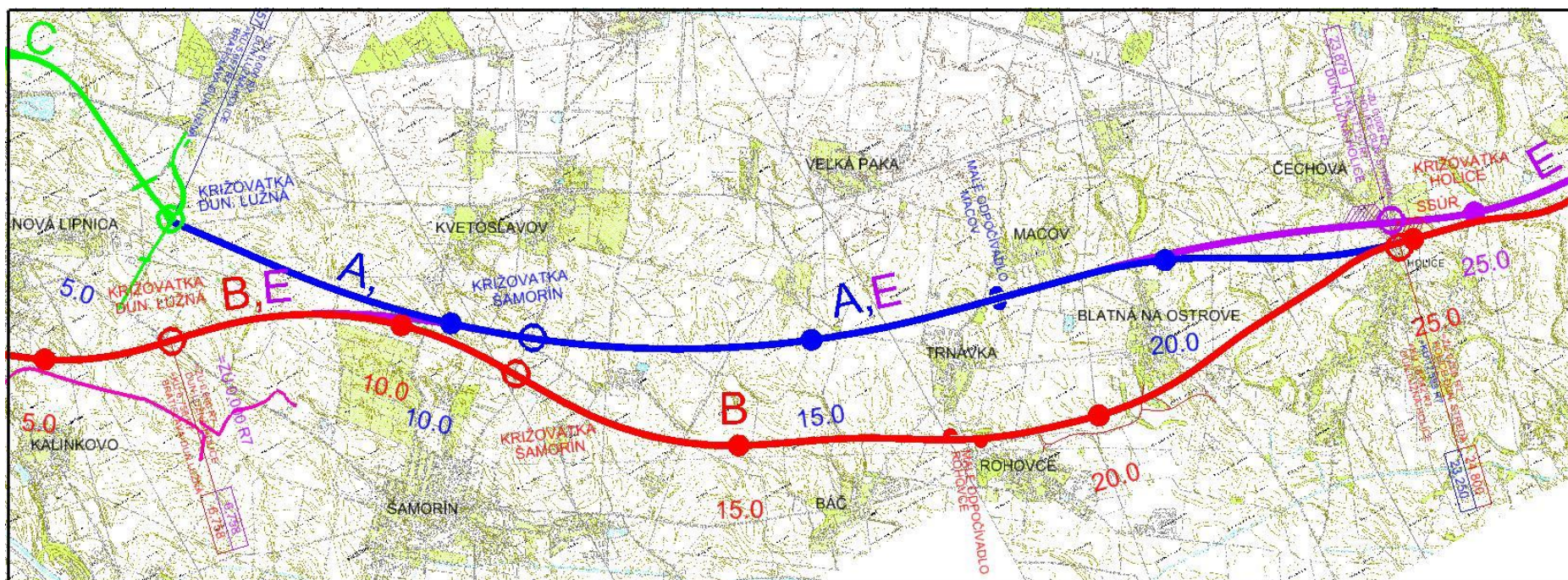
II.15. COMPETENT BODY

Pursuant to Act of the National Council of the Slovak Republic No. 24/2006 Coll. the competent body is the central body of the public administration the competence of which includes the proposed activity the binding assessment, consent, opinion, or statement of which issued according to the special regulations condition permission for the proposed activity. According to Annex No. 8 to Act No. 24/2006 Coll. on Environmental Impact Assessment, Table No. 13 Transport and Telecommunications, the competent body is the **Ministry of Transport, Posts and Telecommunications of the Slovak Republic.**

II.16. STATEMENT ON TRANSBOUNDARY IMPACTS OF THE PROPOSED ACTIVITY

Transboundary environmental impacts of the activity are not expected.

Indicative representation of the route conduct in the section of R7 expressway Dunajská Lužná - Holice:



Disclaimer

This is an English translation of a document that was originally produced in the Slovak language. While we have exercised utmost care to make this translation accurate, it may contain typing or translation errors. Therefore, always consult the Slovak original before making decisions on the basis of this translation.

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

We hereby confirm that the European Bank for Reconstruction and Development shall have no responsibility for the translated content.

Project Implementation Services, spol. s r. o.
Consultant under Consultancy Contract C31934