NON-TECHNICAL SUMMARY
PI MOTORWAY - SLOVAKIA

1 Introduction

This proposed project consists of the construction of five new sections of the D1 trans-European motorway network between the cities of Martin and Prešov with a combined length of 75km plus the associated links to the local highway network (hereinafter referred to as the "Project"). The Project is to be procured under a 30 year Public Private Partnership (PPP) PFI agreement.

This Non-Technical Summary (NTS) describes the Project and summarises the results of the various environmental and social investigations carried out as part of the Project's evaluation and permitting stages that have taken place over its 15 year long preparation time span. The full documentation, including the Environmental Statements, Environmental Impact Assessments (EIA), Social Impact Assessments (SIA), permitting applications and decisions at the conceptual, zoning and building permitting stages, can be accessed for further information and detail at:

- The NDS Communication Center "North" in Žilina
- The NDS Communication Center „East" in Košice (after opening the Center)

- The Ministry of Transport's website section Projects PPP fwww.telecom.gov.sk^)

Additional information centres on or adjacent to the construction works will be made available during the construction phase of the Project by the Concessionaire.

The Project preparation process has aimed at minimising adverse impacts on the environment and people through careful selection of the route in consultation with the public and completion of environmental and social impact assessments compliant with Slovak regulations.

2 Project Description

The Project consists of five sections of motorway of which three are located between the towns of Dubná Skala and Ivachnová (A), one between Jánovce and Jablonov (B) and one between Fričovce and Svinia (C). These sections, which are located in northern Slovakia, form part of the 517km D1 corridor from Bratislava to the border with Ukraine and connect to existing improved sections of the D1 road corridor. Figure 1 indicates the locations of the sections on the D1 corridor. Figure 2 provides details of the major roads in Slovakia and the locations of the existing improved lengths of the D1 that the sections on this Project tie into. Further detailed maps of the route are included within the permitting documentation. The key plans, which form part of the permitting documentation, are included on the Ministry of Transport's (MDPT's) website fwww.telecom.gov.sk').

The D1 portions of the Project are designed as a 2-lane dual carriageway (2+2), the Project includes elevated junctions to maintain and improve the connectivity with the local road network and four tunnels with a combined length of 7.3km. Affected existing roads, tracks and watercourses are, where required, diverted either over or under the proposed new route by the construction of 75 overpasses[1], 13 underpasses, 7 large culverts (between 2m and 12m wide) and numerous small culverts. Where it is practicable

' An overpass carries the D1 and its associated slip roads over depressions, minor roads, rivers, streams, etc. An underpass is where a minor road passes over the Dl,

retaining walls will also be constructed to minimise the Project's required land take and impact on the environment.

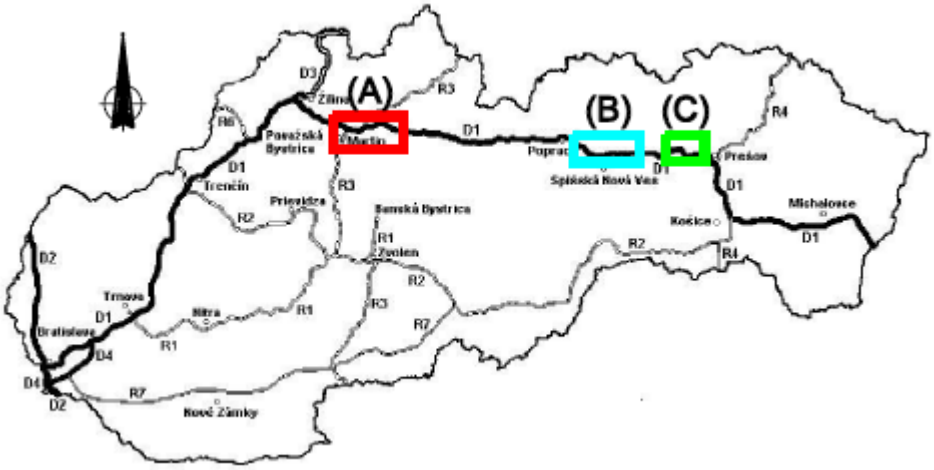

Figure 1 – Project location plan

Key

A Sections 1 to 3 (Dubná Skala to Turany; Turany to Hubová; Hubová to Ivachnová)

B Section 4 (Jánovce to Jablonov)

C Section 5 (Fričovce to Svinia)

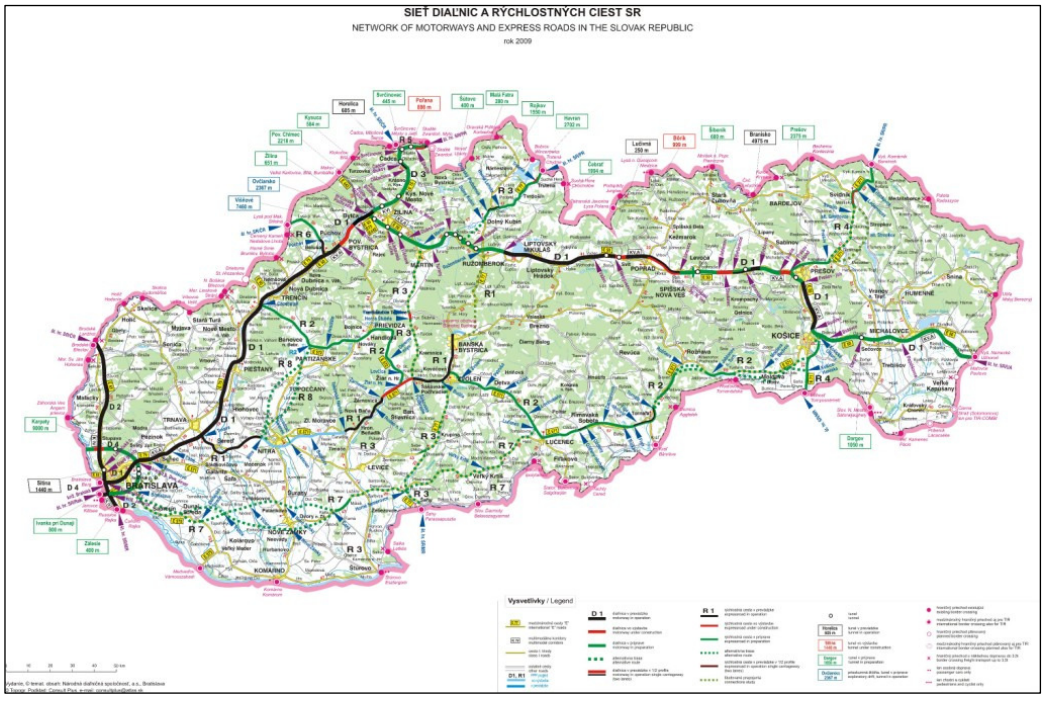

Figure 2 - Slovakia's major highway network (indicating existing improved sections in black)

2.1 Section 1: Dubná Skala to Turany

This D1 motorway section is located in the Žilina region, in the district of Martin and passes through the cadastral areas of Vrútky, Lipovec, Turčianske Kľačany, Sučany and Turany. The total length of this section is approximately 16.3km; it includes three elevated junctions located adjacent to Dubná Skala, Martin and Turany where the route connects into the adjacent highway network. Service areas are provided on the route between the Martin and Turany junctions for fuel, food and relaxation. A 2km link road from the Martin elevated junction provides a connection to the locally important I/18 road.

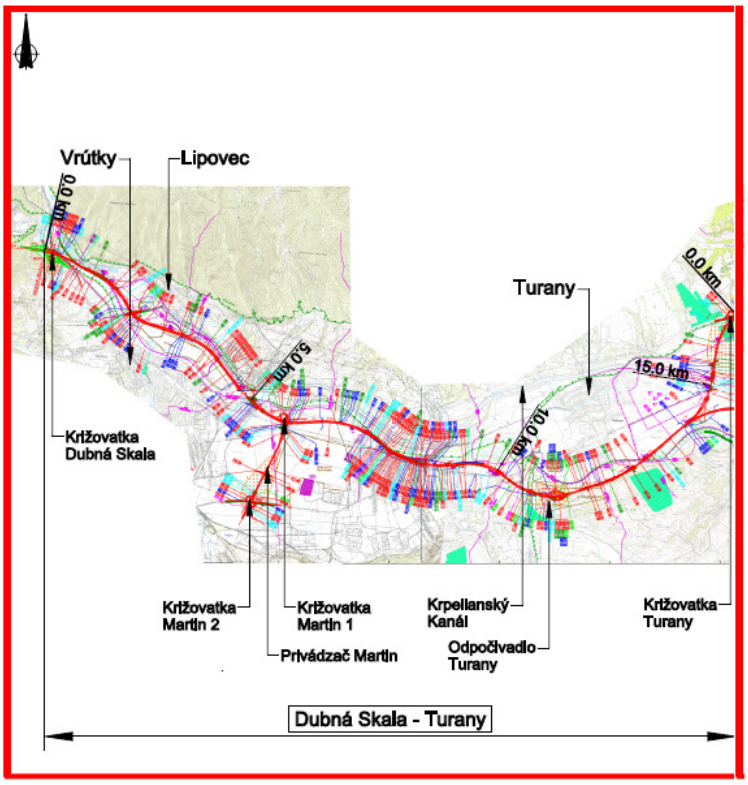

Figure 3 – Section 1: Dubná Skala to Turany

2.2 Section 2: Turany to Hubová

This section of the Project is also located in the Žilina region, in the districts of Martin, Dolný Kubín and Ružomberok and passes through the cadastral areas of Ratkovo, Šútovo, Kraľovany, Rojkov, Stankovany, Ľubochňa, Švošov and Hubová. The section is approximately 13.5km long and includes two tunnels, "Tunel Rojkov" and "Tunel Havran", whose respective lengths are 1.8km and 2.8km. A new maintenance depot facility (SSÚD Stankovany) is to be provided east of the Kraľovany junction.

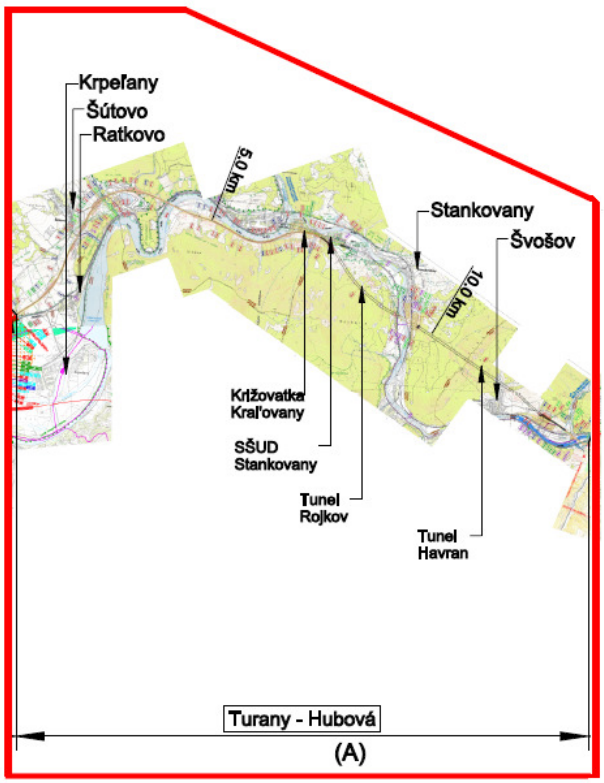

Figure 4 - Section 2: Turany to Hubová

2.3 Section 3: Hubová to Ivachnová

This section of the Project is again located in the Žilina region, in the district of Ružomberok and passes through the cadastral areas of Hrboltová, Likavka, Martinček, Lisková and Ivachnová. The total length of the section is approximately 15.3km and includes the 2.0km long "Tunel Čebraťˊ". The related local road network connects to this section of the D1 via the "Hubová" and "Likavka" elevated junctions. The Project also includes, at its eastern end, works to the existing D1 motorway and the addition of slip roads for a Service Area which will be built by others.

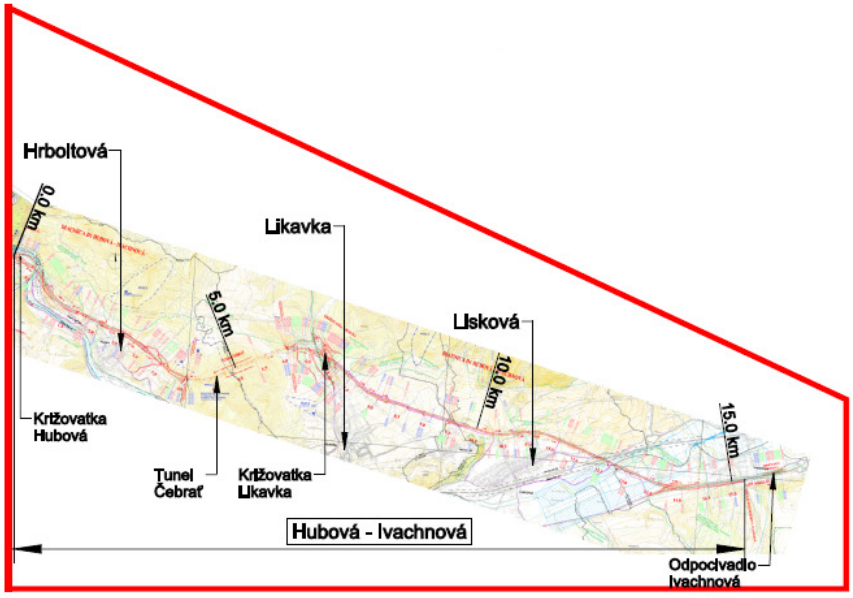

Figure 5 – Section 3: Hubová to Ivachnová

2.4 Section 4: Jánovce to Jablonov

This section of the Project is located in the Prešov and Košice regions, in the districts of Poprad, Kežmarok, Spišská Nová Ves and Levoča. It passes through the cadastral areas of Machalovce, Spišský Štvrtok, Dravce, Illašovce, Kurimany, Levoča, Spišský Hrhov, Klčov, Nemešany and Spišské Podhradie. The total section length is approximately 18.5km and includes the 0.7km long "Tunel Šibeník". It connects to the adjacent local road network via elevated junctions at "Spišský Štvrtok" and "Levoča". Rest areas are included on either side of the motorway southeast of Levoča.

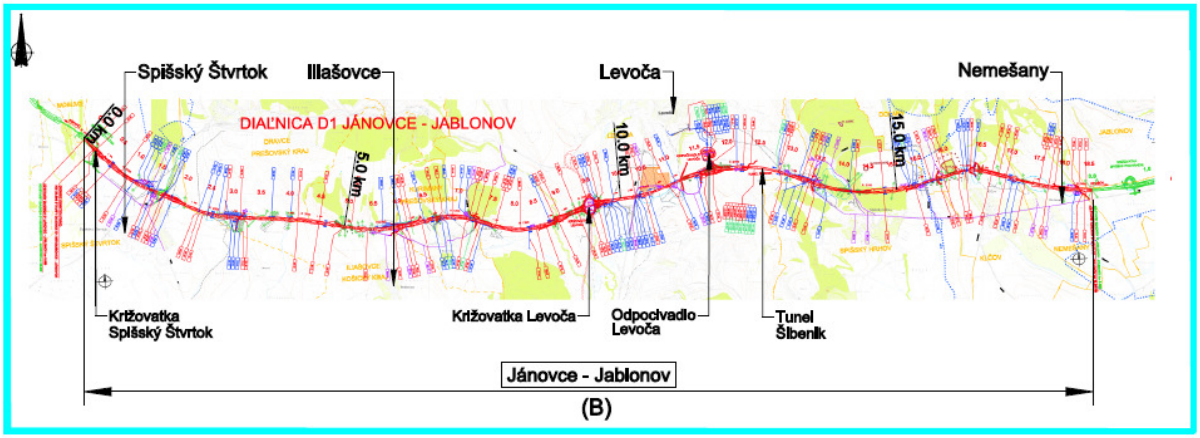

Figure 6 – Section 4: Jánovce to Jablonov

2.5 Section 5: Fričovce to Svinia

This 11.2km section of the Project is located in the district of Prešov and passes through the cadastral areas of Fričovce, Hendrichovce, Bertotovce, Chmiňany, Chminianska Nová Ves and Svinia. At its eastern end this section connects to the Fričovce bypass, which is already under operation. The route continues in a westerly direction before connecting to the existing D1 improved section at Svinia.

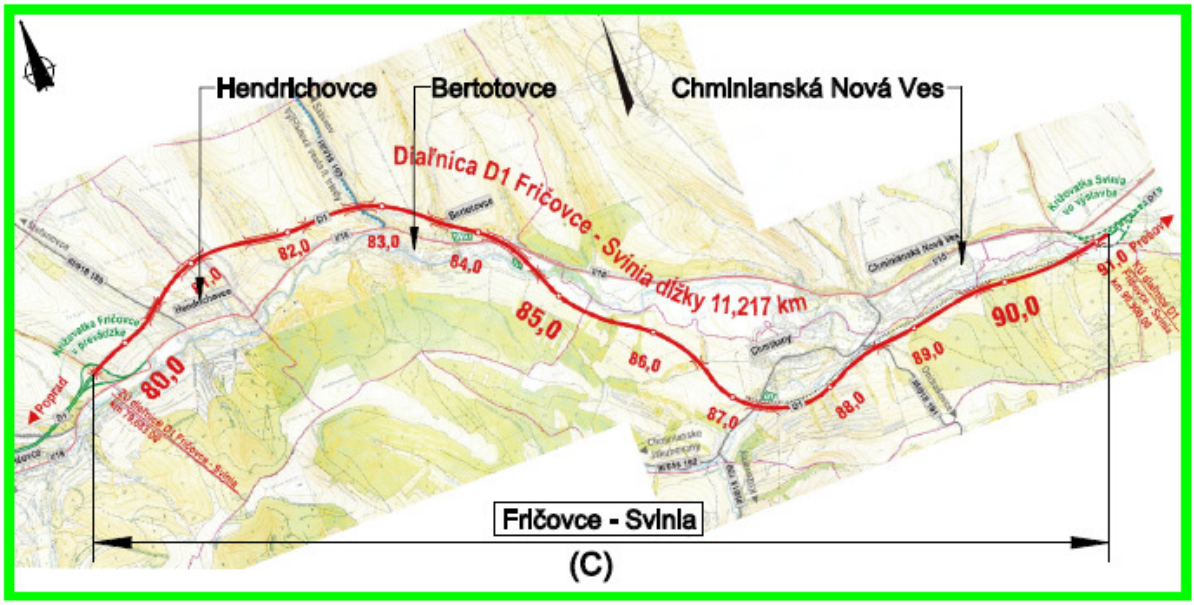

Figure 7 – Section 5: Fričovce to Svinia

3 Rationale for the Project

Sections of the current road network within the northern part of the country are below the standard associated with a major regional route that not only forms a primary route connecting the western and eastern parts of Slovakia but which also forms part of the trans-European highway network. Congestion and a high accident rate[2] can be attributed to a combination of the standard of the existing roads and the fact that the existing routes pass through numerous urban zones.

The Project benefits include:

- Improvements in the conditions of transit and regional transportation.
- Decreased levels of accidents.
- Reduction of fuel consumption and traffic air emissions.
- Reduction of vehicle wear as a result of excluding driving through the urban areas.
- Improvements in living conditions and amenity in towns by diverting traffic resulting in reduced levels of emissions and noise.
- Improved interconnection between the regions within the Slovak Republic, namely improvement in the interconnection between the extreme western and the most eastern regions of the Slovak Republic.
- Improved accessibility to neighbouring regions and countries. The D1 is included in the International road corridor E50 connecting Brest – Paris – Nürnberg – Plzen – Brno – motorway D1 (Trenčín – Žilina – Poprad – Košice) – Mukacevo (Ukraine).
- Reducing regional disparities and enabling the economic development of the regions in question.
- Improved freight transport links.
- Improved accessibility to important regions for tourism, such as the High Tatras and Western Tatras.
- Provision of employment during the construction and operational periods of the Project.
- Strategically, the implementation of the Project will contribute to the competitiveness of Slovakia and its sustainable development.

[2]In 2007 the District Traffic Accident in the districts in question was as follows: Martin – 2,37 accidents/km/year, Ružomberok – 3,07 accidents/km/year, Spišská Nová Ves – 1,76 accidents/km/year, Levoča – 1,64 accidents/km/year a Prešov – 1,94 compared to the national average of 1,38 accidents/km/year; moreover the sections in question were evaluated by EuroRAP (European Road Assessment Programme) as highly risky. The European Transport Safety Council evaluated Slovakia in its recent 3rd Road Safety PIN Report as being one of the least improving countries concerning road deaths. An analysis of recent statistics indicates that almost no progress has occurred on the route ("Road deaths per million population" – 114 in 2001, 112 in 2008).
Further information can be found at:
www.eurorap.org;
http://www.ssc.sk/sk/Bezpecnost-cestnej-premavky-BECEP/Kriticke-nehodove-lokality/Kriticke-nehodove-lokality-a-hustota.ssc and
http://www.etsc.eu/documents/ETSC%20PIN%20Annual%20Report%202009.pdf.

4 Summary of the Legal Context

The Project preparation started in 1993 and has since progressed through a number of approval stages in accordance with and in compliance with Slovak national legislation. The Slovak permitting process is responsive to public and other stakeholder concerns, the evolving design, engineering refinements to the Project and to changes to legislation. The process is designed to enable and ensure that any stakeholder issues that were not fully addressed in the Environmental Impact Assessment (EIA) are taken forward to be assessed. The following section of this document summarises how the permitting process has been used to review, and if necessary mitigate, the potential environmental and social impacts of the Project.

The environmental impact assessment process was introduced into the Slovak legislation by the Act no. 17/1992 Coll. It was further improved by Act no. 127/1994 Coll. on assessment of environmental impacts which took into account the provisions of the EU EIA Directive (85/337/EEC) as amended by the Directive 97/11/EC. After Slovakia's Accession to the EU the environmental impact assessment process was amended by Act 24/2006 Coll. which is fully harmonised with EU legislation. This act includes the transitional provision that if the EIA process was started prior to 1st February 2006 it will be completed in accordance with the previous Act (127/1994); this provision applies to the Project.

Assessment of plans and projects which could significantly affect Natura 2000[3] sites are set down in Article 6 of the Habitats Directive 92/43/EEC. This Directive was implemented into Slovak legislation by Section 28 of the Slovak Nature and Landscape Protection Act 543/2002 Coll. This legislation requires projects which could affect the Natura 2000 sites in Slovakia to be assessed. The subsequent studies relating to the assessment the potential effects of the Project on the Natura 2000 sites are identified in the table in section 4.2 of this NTS.

4.1 Permitting process

The table below provides a summary of the permitting process. Cross references to where specific documentation relating to the Project can be located are provided in the following sections.

	Name of the document	Description	Decision making authority	Author	Key outcome
1.	Strategic Studies	Strategic documents outlining key priorities of the road infrastructure in Slovakia	Slovak government	Ministry of Transport	Strategic document outlining the road transportation priorities and cumulative effects of the proposed transportation programmes.
2.	EIA process	Environmental impact assessment of the proposed activity	Screening Decision/ Final Statement issued by the Ministry of Environment	Party wishing to perform assessed activity	Pre-condition for zoning permit. Conditions under which the assessed activity may be performed and mitigation required during the zoning or building permitting process or in the construction or post construction activities.
3.	Zoning permit (DUR)	Determines the final alignment of the road and associated objects within a given area	Local municipality authority	Party intending to construct	Precondition for a building permit. Further conditions, which include social and environmental issues, that need to be addressed as part of the detail design and construction stage.

[3] Natura 2000 sites are those identified as sites of Community importance under the Habitats Directive (92/43/EEC) or classified as Special Protection Areas (SPAs) under the Birds Directive (79/409/EEC).

	Name of the document	Description	Decision making authority	Author	Key outcome
4.	Building permit (DSP)	Permit to construct with greater degree of detail pertaining to construction and its management	Ministry of Transport	Party intending to construct	Outstanding DUR conditions highlighted (e.g. those relating to construction phase activities), Requirements added for any further conditions that need to be met either during further design development or during the construction and operation phases.
5.	Occupation permit	Permission to open the road for public	Ministry of Transport	Investor	All conditions of building permit have been met plus as-built safety conditions verified by police and other relevant authorities. Additional conditions for operation may be set out.

4.2 The EIA Process

Act no. 127/1994 Coll. (the act to which the original EIAs were prepared) sets out that the assessment of the impacts associated with the construction of transport corridors are to be carried out in 2 stages. The first stage being a feasibility study containing alternatives of the proposed route and the second stage being the environmental study (EIA) of the individual sections of the route. A feasibility study of the whole length of the D1 route was undertaken in 1993. This feasibility study was the first stage of the assessment of linear construction corridors as required under the EIA Act 1994 and considered alternative options and cumulative effects. A comprehensive and extensive update to the original study was performed in 2001[4].

The EIA process in Slovakia consists of a number of distinctive stages:

Stage	Description	Author	Public access
1. Preliminary environmental study ("Zamer")	Basic information of proposed activity; variants; actual status of environment in affected territory; assumed affects on environment (specifically land, energy and raw material demands on the environment); evaluation of advantages and disadvantages of proposed alternatives; proposal of mitigation measures	Party proposing assessed activity	Information on "Zamer" advertised by the municipality officials in each affected municipality, the public are invited and have the right to see, review and comment
2. Screening decision	Decision as to whether an EIA is needed or not, depending on what is to be built in a given area	Ministry of Environment	Decision is made whether further assessments are needed or not. If they are then the project moves to Stage 3. If not then the project passes to the Zoning Permit stage.
3. Scoping of assessment	Decision on scope and timeline of environmental impact assessment	Ministry of Environment	Clearly defined set of measurements and assessments to be made before EIA report is conducted

[4] Aktualizacia predinvesticnej studie programu rozvoja dialnic – Exe summary.pdf Aktualizácia predinvestičnej štúdie programu rozvoja diaľnic v SR – full document.doc. A hard copy can be viewed at the locations disclosed in section 1 of this NTS.

Stage	Description	Author	Public access
4. EIA study	Detailed analysis of environmental impacts of various variants and zero variant (i.e. "do nothing" variant)	Party proposing assessed activity	Publicised at the Ministry of Environment's website and the local municipality offices; public have the right to review and to submit comments either in writing or at public hearings
5. Expert review	Opinion of an independent expert on the EIA study	Ministry of Environment	An independent review of the study and its conclusions
6. Final statement (Final record/opinion)	Recommendation and rationale of preferred variant and determination of conditions under which the preferred variant may be permitted. It also contains replies to public comments.	Ministry of Environment	Publicised on the Ministry of Environment's website and the local municipality offices

All relevant stages of these legal requirements have been completed for the Project as outlined below:

<table>
<tr><td colspan="2" rowspan="2">Stage:</td><td colspan="3">Dubná Skala - Ivachnová</td><td>Jánovce – Jablonov</td><td>Fričovce - Svinia</td></tr>
<tr><td colspan="5">Names of Documents</td></tr>
<tr><td colspan="2">Strategic Studies</td><td colspan="5">The key strategic documents which consider the overall cumulative effects of the proposed road programme and transportation programme in Slovakia:
• In 1993 there was a feasibility study for the proposed Slovakian Highways, including the D1 route. This feasibility study was part of the first stage of the cumulative assessment of linear construction corridors in Slovakia.
• A comprehensive and extensive update to the original feasibility study was undertaken in 2001 (Aktualizacia predinvesticnej studie programu rozvoja dialnic – Exe summary.pdf Aktualizácia predinvestičnej štúdie programu rozvoja diaľnic v SR – full document.doc)[5].
• Strategic Environmental Assessment of the transportation programme in Slovakia "Operational Program Transportation for years 2007 – 2013" was prepared in December 2006[6].</td></tr>
<tr><td colspan="2" rowspan="2">EIA documentation:</td><td colspan="3">Dubná Skala – Ivachnová</td><td rowspan="2">Jánovce – Jablonov</td><td rowspan="2">Fričovce – Svinia</td></tr>
<tr><td>Dubná Skala – Turany</td><td>Turany – Hubová</td><td>Hubová - Ivachnová</td></tr>
<tr><td></td><td>Preliminary environmental study ("Zamer")</td><td colspan="3">Východisková environmentálna štúdia D1 Martin – Ivachnová (1995)</td><td colspan="2">Východisková environmentálna štúdia D1 Hybe – Prešov (1993)</td></tr>
<tr><td></td><td>Screening decision</td><td colspan="3">16.10.1995, Ministry of Environment (MZP SR)</td><td>11.1.1994, Ministry of Environment (MZP SR)</td><td>14. 2. 1996, Ministry of Environment (MZP SR)</td></tr>
<tr><td></td><td>EIA study</td><td colspan="2">Dialnica D1 Martin - Ľubochňa: Sprava o hodnoteni vplyvov na zivotne prostredie: Žilina, April 1997, prepared by Enviconsult s.r.o.</td><td>Dialnica D1 Ľubochňa - Ivachnová: Sprava o hodnoteni vplyvov na zivotne prostredie: Bratislava, October 1996, prepared by EKOJET</td><td>Dialnica D1 Usek Jánovce – Jablonov: Sprava o hodnoteni vplyvov na zivotne prostredie: August 1996, prepared by PRAGOPPOJEKT.</td><td>Dialnica D1 Fricovce – Prešov: Sprava o hodnoteni vplyvov na ZP: Bratislava December 1996, prepared by DOPRAVOPROJEKT, a.s.</td></tr>
</table>

[5] A hard copy is placed at the locations disclosed in section 1 of this NTS
[6] http://eia.enviroportal.sk/detail/operacny-program-doprav

	Expert review	Expert review prepared by RNDr. Dusan Blasko, EnviGeo s.r.o., Banská Bystricá, December 1997.	Expert review prepared by RNDr. Pavol Tupy, EnviGeo s.r.o., Banská Bystricá, July 1997.	Expert review prepared by Ing. Jozef Krautschneider, EKOPED, Žilina, January 1997	Expert review prepared by Ing. Julius Belic, EVIS, Banská Bystricá, May 1997.
	Final Statement	D1 Martin – Ľubochňa: Final Statement, 12.11.2002 Validity prolonged by the Ministry of Environment (MZP SR) Decision (8.8.2006) until 1.2.2008 Validity prolonged by the Ministry of Environment (MZP SR) Decision (30.1.2008) until 1.2.2010	D1 Lubochna – Ivachnová: Final Statement, 24.9.1997	D1 Jánovce – Jablonov: Final Statement, 7.3.1997	D1 Fricovce – Prešov: Final Statement, 22.7.1997 Validity prolonged by the Ministry of Environment (MZP SR) Decision (27.10.2006) until 1.2.2008
Subsequent studies and opinions:	Natura 2000 related studies:	In 2004 the study 'Motorways and Expressways – Relation to Natura 2000 report' (Diaľnice a rýchlostné cesty – vzťah k NATURA 2000) was undertaken. This identified the Natura 2000 sites in the vicinity of the proposed Slovak roads schemes and included a high level assessment as to whether these proposed schemes would influence these sites. In 2008 this study was updated in connection with the further proposed sites to complete the Natura 2000 network in Slovakia.			
		Natura 2000 Declarations under Annex I : • D1 Dubná Skala – Turany : 14 July 2008 • D1 Turany – Hubová : 11 July 2008 • D1 Hubová – Ivachnová : 11 July 2008 Study "Assessment of an importance of effects of the proposed D1 Turany – Hubová on Natura 2000 sites"[7]	Natura 2000 Declaration under Annex I : 11 July 2008	Natura 2000 Declaration under Annex I : 14 July 2008

[7] These studies and declarations are available on Project website: (www.telecom.gov.sk)

	Social Impact Assess-ments:	In 2008 the following Social Impacts assessments were undertaken regarding the Project:		
		Projekt SIA: pre dial'ničné úseky v režime PPP: Súhrnná správa: Úsek D1: Dubná Skala - Ivachnová	Projekt SIA: pre dial'ničné úseky v režime PPP: Súhrnná správa: Úsek D1: Jánovce - Jablonov	Projekt SIA: pre dial'ničné úseky v režime PPP: Súhrnná správa: Úsek D1: Fričovce – Svinia

4.3 Land Acquisition

The Ministry of Transport is responsible for the preparation for and the acquisition of land. It is also responsible for securing the right to demolish structures within the Project boundaries.

Key aspects of Slovak law that relate to land acquisition and expropriation that are of relevance to this Project include:

- Slovak Constitution - protection of ownership rights of any owner is guaranteed by the Slovak Constitution. Expropriation or any other limitation in ownership rights is permitted only to the extent necessary to the public interest, on the basis of law and for appropriate compensation.

- Civil Code – the Civil Code further stipulates and guarantees the same rights and obligations to all owners (either private subjects or public ones such as the State or municipalities). Ownership may be also acquired by expropriation. Expropriation may only be done in accordance with the law, in public interest, for specific purpose and for appropriate compensation. The procedure for expropriation is governed by the Building Act.

- Building Act - the Building Act further stipulates the aims of and conditions where expropriation can be used. Expropriation involves the restriction of rights not the total removal of the affected party's rights. If through expropriation the ownership right is only required for a section of the party's land but the owner or other authorised person would not be able to use, or would have difficulty in the use of, the remaining part of the land the expropriation is extended to include additional land if requested by the owner.

The stages of land acquisition and expropriation process of relevance to the Project are outlined in the following table.

Stage of expropriation procedure	Actions taken
Attempted voluntary sale-purchase	- Investor procures an expert for the land plot/real estate evaluation and other documentation needed to determine the fair price required for signing a sale-purchase contract - Investor delivers a draft sale contract to the other party - Contract is negotiated and signed - Bonus 20% of the evaluation price if voluntary sale is agreed
Involuntary expropriation procedure	- If an agreement on sale is not achieved or the other party does not respond the Investor will initiate expropriation procedure at the relevant office - Hearing with both parties is organized and objections are taken - Relevant authority decides - Expropriation decision may be subject of appellate procedure or judicial review

Compensation is based on an independent expert valuation. Expert valuation represents the fair value, i.e. full replacement value to be paid to owners, including relocation and other costs incurred, so that they are no worse off as a result of the Project. In the case where land is leased for agricultural purposes, the relevant expert valuation will reflect the full replacement value of crops to be paid to lessee.

The State is seeking amicable acquisition of land. According to the new legislation effective from 1st January 2009[8] the owners are incentivised to voluntarily sell their land and assets by the possibility of obtaining a 20% higher price than determined by an expert valuation. The increased price may also be paid after expropriation procedure has started if an agreement is achieved. In line with EBRD requirements a Resettlement Action Plan is being prepared for the Project.

4.4 Concession Agreement

Under Clause 14 of the Concessionaire Agreement the Concessionaire is responsible for complying with all applicable environmental laws, permits, conditions and requirements of the environmental impact statements, zoning permits, building permits and the Public Authority's requirements. The Concessionaire is responsible for obtaining all necessary consents and must set up and operate an Environmental Monitoring System based upon ISO EN 14001. The Concession Agreement includes mechanisms to deal with new legislation and Public Authority changes as well as termination clauses if the Concessionaire fails to comply with the terms of the Agreement. An Independent Engineer is appointed to audit and monitor the Concessionaire's performance; the Concessionaire must also appoint an experienced Environmental Manager.

[8] Legislation no. 540/2008/Coll. For more information see : http://jaspi.justice.gov.sk

5 Route selection and consideration of alternative routes

The following main variants were considered[9]:

- Section 1 Dubná Skala – Turany: two variants (A1 and A2);
- Section 2 Turany – Hubová: two main corridors (B1 and B2);
- Section 3 Hubová – Ivachnová: one main route with 4 local variations;
- Section 4 Jánovce – Jablonov: one route with variation around the town of Levoča; and
- Section 5 Fričovce – Svinia: two main variants (southern and northern).

Maps showing these variants are contained in the EIAs which can be accessed under the Ministry of Transport's (MDPT's) website (www.telecom.gov.sk).

The four main criteria for route selection evaluation used in the course of the EIA process were: traffic, environment/ecology, technical/economic and social/economic aspects. More detailed sub-criteria such as impacts on urbanised areas, affected inhabitants, protected areas and the soil were considered. Evaluation criteria for the comparison and assessment of variants are described in the EIA Chapter C section V.

The final preferred routes based on the conclusions of the EIA stage were identified on the basis of the official feedback from the affected bodies and the public comments collected within the process of preparation of the EIA reports as well as the expert review. Those outcomes are contained in the Final Statements Chapter V (Conclusions) together with recommendations for phase of preparation and construction.

The key considerations and outcomes of the EIA stage in relation to route selection are summarized below:

- Variants A1 and A2 and B1 and B2 were evaluated separately and then in cross-correlation. The technical-economical comparison of variants A1 and A2 resulted in the conclusion that variant A2 was more expensive (1,175 million Sk), required more land take (8 ha) and was longer (1,3km).
- The technical-economical comparison of variants B1 and B2/PT concluded that variant B2/PT was longer (3km) and required more land take (31 ha), however variant B1 was more expensive (3.155 million Sk). These comparisons resulted in moderate preference of variant A2 + B1 ahead of A1 + B1, however it was stated that the essential disadvantage of variant B1 was its financial cost.
- Variants A1 and A2 were evaluated as comparable. Variant B1 was evaluated as more suitable from environmental perspective, however, it also had potential disadvantages, such as tunnel Korbeľka was to be located in the accumulation area of ground water sources (with yield of 36 l/s), the construction of the two tunnels was considered financially difficult and interconnection to other northern regions (such as Orava), municipalities (Turany, Krpeľany, Ratkovo, Nolčovo, Šútovo) and recreation areas (Trusalová – Marias, Biele Brehy and Kľačianska Magura) was problematic and not satisfactory resolved.
- Variant B2 (variant B2 was assessed in sub variants – TT, PP, TP, PT) was assessed as less expensive from the financial perspective (costs deference being 5.5 billion SKK) and being more suitable in respect to interconnection with existing road network of northern regions of Slovakia (Orava).
- For Fričovce - Svinia both the variants evaluated during the EIA stage were evaluated as comparable.

Following the EIA further technical studies and financial evaluation were undertaken resulting in variant B2 being selected for technical, economic and transport connection reasons. Additional technical evaluation and development of the route was undertaken during the permitting process which resulted in the removal of the 2 tunnels, Šútovo and Malá Fatra. This change was considered in the Zoning Permit and additional

[9] Refer to EIAs for further details of route options.

environmental studies were undertaken. Mitigation measures were then incorporated to ensure any potential additional effects were minimised.

In summary the following routes were selected and these now form the basis for the Project:

- Dubná Skala – Turany – Variant A1 (marked red in the route selection study)
- Turany – Hubová – Variant B2 (marked brown-green in the EIA study) with a slight amendment consisting of the removal of the 2 tunnels, Šútovo and Malá Fatra.
- Hubová – Ivachnová – Variant C (marked red in the EIA study)
- Jánovce – Jablonov – Route with local variation around Levoča (local variation is based on the black alignment shown in the EIA study)
- Fričovce – Svinia the southern route (Variant I)

These routes are indicated on the maps in section 2 of this NTS.

6 Public Consultation

EIAs were discussed at public consultations which were prepared in cooperation with the relevant municipalities. Minutes, which summarise the agenda, questions raised by the participants and the responses of the responsible representatives, were written for each public consultation. Public consultations took place throughout the years 1996 and 1997.

6.1 Public Consultation on EIA

A summary of public consultation undertaken on the EIA Reports can be seen in the Final Statements. Minutes which were written for each of the public consultations are archived at the Ministry of Environment in the official files. They contain the place and date of each public consultation, questions raised by the public and the corresponding responses. The most frequent questions related to property, measures to mitigate the impact of the Project during the construction period and noise mitigation measures during the operation period. Comments which were presented at the public consultations in each of the municipalities were of a practical nature concerning the impact of the Project. Summary tables of the public consultation meetings are provided below:

Sections 1 to 3: Dubná Skala – Ivachnová

Location	Date	Notes	Summary of public comments
Martin – Ľubochňa			
Kraľovany	1. July 1997	Attendees:28, citizens have univocally supported alternative B1	Purchase of land plots and agricultural land, proprietary settlement.
Vrútky	3. July 1997	Number of attendees not stated	Time frame of highway construction, traffic intensity after construction of highway, highway route details and storage of mined material.
Podhradie	25. June 1997	Attendees:14	Raised request for possibility of southern diversion of highway, in respect of the interference to place "Rusnák". Further negotiated questions of highway fee, migrating animals, geological surrounding and length of tunnel Korbelka.
Turčianske Kľačany	9. July 1997	Attendees:18	Raised request for building up a soccer playground on a alternative location, construction of a bridge in place of demolished footbridge over River, by which the interconnection of Turčianske Kľačany and Vrútky would be enabled and so the possibility to link with highway D1. Also it was suggested to consider the possibility of interlinking the local sewerage system to sewerage water plant constructed for the highway.
Šútovo	2. July 1997	Attendees:21, citizens have univocally supported alternative B1	Purchase, occupation of land, safety on highway, protection against noise. When choosing alternative B1 it was suggested to consider construction of highway feeder Turany – Ratkovo.
Martin	3. July 1997	Number of attendees not stated	Raised objections were reflected in the statement addressed to Útvar hlavného architekta mesta Martin – Office of main architect of town Martin (letter dated 31.7.1997).
Stankovany	1. July 1997	Attendees:57, citizens have univocally supported alternative B1	Alternatives, water resources, purchase and compensation of citizens, influence on citizens.

Location	Date	Notes	Summary of public comments
Krpeľany	2. July 1997	Attendees:40, citizens have univocally supported alternative B2	Purchase, solutions for highway crossings, entrance of highway. In event of choosing alternative B1 raised request of shifting the highway route ca. 200 – 300 m from municipality and to follow more the Váh stream. Further they request securing the air pollution monitoring at tunnel portals Korbelka and construction of collecting tank of sewerage processed surface water outside the municipality and cabin area.
Hubová	26. June 1997	Attendees:19	Raised request to adjust the local roads in advance so the negative impacts of freight traffic are eliminated. Also question relating to small water plants were discussed, environmental influence caused by tunnel and proceeding when establishing damages to houses.
Sučany	8. July 1997	Attendees:35, citizens do not support any alternative	Raised request that the highway route is within area below shooting gallery in event of choice of the northern location, and in event of southern location below the tunnel Bukovina.
Turčianska Štiavnička	25. June 1997	Attendees:18	Linking to alternative B1, effects of highway to population, purchase of plots.
Turany	8. July 1997	Attendees:30 citizens + 20 municipality representatives, citizens have univocally supported alternative B2	Liquidation of ”Rusnák” municipality, date of highway construction, proprietary settlement of land plots. In event of alternative B2 the recommendation for shifting the route in south direction was presented and in event of B1 recommendation to solve the linkage of highway with road I/18 by means of highway feeder Turany – Ratkovo. There was also the recommendation expressed to revaluate the location of highway crossroad “Ľubochňa” and in event of maintenance depot facility construction the recommendation to locate it in cadastre area Turany, at the west portal of tunnel Korbelka. A request was made for the construction a highway rest place in area Turany.
Ratkovo	9. July 1997	Attendees:21, citizens have univocally supported alternative B1	Land Purchase, migration of animals
Ľubochňa – Ivachnová			
Ivachnová	5. March 1997	Attendees:55	Discussed questions were identical with those stated in the letter sent as statement MŽP SR – Ministry of environment of SR.
Martinček	4. March 1997	Attendees:20	Following requests were raised: shifting the route to north from the municipality, to revaluate the need of anti-noise measures. Also the warning was raised that in event of construction works in area of buried cholera victims, there is the threat of an infection.
Likavka	4. March 1997	Attendees:162	Following requests were raised: construction of road relocation I/59 from Ružomberok to highway outside the municipality, to prove the possibility of locating a feeder road in direction Martinček – Ružomberok, to exclude demolition of 6 family houses, shifting the route in north direction, prices for purchase, limitation of traffic in the municipality during construction works, parking places for castle Likavka, planned use of old brickworks and storage of redundant land due to preparation of regional dump.

Location	Date	Notes	Summary of public comments
Ružomberok	6. March 1997	Attendees:14	Possibility of shifting the route to north, refusal of establishing other dumps, note of incorrect drawing of archaeological excavations Hrádok, request for securing access to land plots after the highway construction, they ask to specify the number of demolished houses. Further the present representatives of public noted the status of environment pollution, disproportion of drawing the forest park, need for Čebrať tunnel ventilation so the municipality is not affected, loss of green areas and its compensation and participation of citizens at the monitoring.
Lisková	5. March 1997	Attendees: 28	Shifting the route to north, construction of anti-noise wall, securing access to land plots, draining the locality in km 16,0, reconstruction of roads damaged by construction.

Section 4: Jánovce - Jablonov

Location	Date	Notes	Summary of public comments
Spišský Štvrtok (negotiations common for municipalities Sp. Štvrtok and Jánovce)	18. 11. 1996	Number of attendees not stated	▪ manner of proprietary settlement for occupied land plots, compensation for owners of family houses (all municipalities) ▪ protection of citizens of municipalities against negative impact– construction, noise and emissions during the operation (Iliašovce, Kurimany, Doľany) ▪ reasons for highway route through forest land fund and protected areas and their protection (Levoča, Spišský Hrhov, Doľany) ▪ manner and possibility of linking the municipalities to highway (Dravce, Iliašovce, Kurimany) ▪ protection of archaeological excavations (Levoča, Iliašovce) ▪ protection of water resources (Spišský Štvrtok, Jablonov, Spišský Hrhov) ▪ possibilities of route modification (Spišský Štvrtok, Spišský Hrhov) ▪ possibilities of employment for local citizens (Iliašovce, Doľany) ▪ possibilities of coordination and financing local investments (infrastructure) with highway construction (Dravce, Iliašovce) ▪ linking to roads of lower category (Spišský Štvrtok) ▪ solutions for crossings through highway– local roads, agricultural roads (Spišský Hrhov) ▪ disagreement with modified highway route near Levoča (Levoča)
Dravce	18. 11. 1996	Number of attendees not stated	
Levoča	19. 11. 1996	Number of attendees not stated	
Iliašovce	19. 11. 1996	Number of attendees not stated	
Jablonov (common for municipalities Jablonov and Sp. Podhradie)	20. 11. 1996	Number of attendees not stated	
Spišský Hrhov	20. 11. 1996	Number of attendees not stated	
Kurimany	21. 11. 1996	Number of attendees not stated	
Doľany	21. 11. 1996	Number of attendees not stated	

Section 5: Fričovce – Prešov

Location	Date	Notes	Summary of public comments
Haniska	7.4.1997	Number of attendees not stated	▪ manner of proprietary settlement for occupied land plots, compensation for owners of family houses (all municipalities) ▪ alternative route of highway near municipality Haniska (Prešov, Haniska, Petrovany) ▪ environmental protection – noise, emissions (Prešov, Haniska, Petrovany, Bertotovce, Hendrichovce, Chminianska Nová Ves) ▪ ecological impact on river Torysa (Haniska, Petrovany) ▪ solutions for migration corridors (Fričovce) ▪ preserving the field roads (Hendrichovce, Chmiňany, Fričovce) ▪ highway maintenance (Fričovce, Chmiňany, Hendrichovce) ▪ interruption of water-carrying layers (Fričovce) ▪ final specification of highway route, date of execution of evaluated part (Chminianska Nová Ves, Prešov, Haniska) ▪ possibilities of route modification (Chmiňany, Haniska, Chminianska Nová Ves, Prešov) ▪ occupation of local water source (Hendrichovce) ▪ solutions for distribution grid (Bertotovce, Svinia, Kojatice) ▪ possibility of employment for local citizens (Bertotovce) ▪ locating a crossroad Chmiňany towards Prešov (Chminianska Nová Ves) ▪ traffic affecting municipality Haniska (Haniska) during the construction ▪ the possibility of contribution on part of SSC for preparing zoning documentation of municipality Haniska ▪ locating a interchange crossroad and possibility of linking the municipality to highway (Chmiňany) ▪ use of land plots between the highway and road I/18 (Svinia, Kojatice) ▪ securing current possibilities of traffic and linking to highway D1 (Svinia, Kojatice) ▪ width settlement (Svinia, Kojatice)
Petrovany	7.4.1997	Number of attendees not stated	
Chminianska Nová Ves	9.4.1997	Number of attendees not stated	
Chmiňany	9.4.1997	Number of attendees not stated	
Bertotovce	10.4.1997	Number of attendees not stated	
Hendrichovce	10.4.1997	Number of attendees not stated	
Fričovce	7.4.1997	Number of attendees not stated	
Prešov	8.4.1997	Number of attendees not stated	
Svinia	8.4.1997	Number of attendees not stated	
Kojatice	8.4.1997	Number of attendees not stated	

There are also a number of individual objections summarised in the Final Statements; where possible questions, mainly on technical issues such as noise levels, were answered directly at the hearings. Responses are contained in the minutes and in certain cases also in the Final Statements. A number of comments are included in the Final Statements as conditions of the Ministry of Environment. The Final Statements are then published so people are aware if and how their comments were processed.

6.2 Consultation During Permitting

As part of the Zoning Permit (DUR) and Building Permit (DSP) processes, the permit application with supportive documentation is disclosed and the public are provided with the opportunity to comment and raise objections. Objections are either in the form of comments raised by the relevant municipality or by individuals and organisations. Public objections are either accepted and dealt with via the permit or rejected. If objections are accepted they become binding for the investor or alternatively the reasons why they are not accepted must be properly given. Both the Zoning and Building permits are published and made publicly available.

Among others the following objections and comments were raised and accepted during the Zoning Permit process:

Dubná Skala – Turany: ensure noise elimination which should be supervised by proper monitoring, façade alterations.
Turany – Hubová: ensure the proper substituted living for the occupants of the family houses close to the D1 route.
Jánovce – Jablonov: retain the anti-fire basin, refrain from planting trees such as maple trees, oak tree and beech trees in area of village Dravce that have previously proved unsuitable for the area.
Fričovce – Svinia: use of local roads during construction phase; secure the over bridging of the field roads and streams; control the water table in the water wells before the start of construction, carry out pre-construction surveys of buildings, ensure the access to the estates which will be localized in rural zone, build the 50 meters long canal lock at 88.47km of D1.

6.3 Recent Public Participation

In 2008 the Social Impact Assessment (SIA) reports were prepared for the following routes these are available on the Ministry of Transport's (MDPT's) website (www.telecom.gov.sk):

- Dubná Skala – Ivachnová, (containing sections Dubná Skala to Turany, Turany – Hubová – and Hubová – Ivachnová)
- Jánovce – Jablonov,
- Fricovce – Svinia.

The main emphasis of the assessments was to understand the effect the Project would have on the social environment in the affected area. This considered how changes resulting from the Project would affect people and institutions, including the impacts on vulnerable groups.

The scope of the assessments included identifying attitudes towards the Project; the information for this was assembled using different methods including group discussions, individual in-depth interviews and questionnaires.

Attitudes towards the operation of the Project were generally positive and that the Project was seen as necessary. The public feels an acute need for improvements to the infrastructure in this area as, according to the public, the existing roads have reached their capacity. The public also expressed that it was unbearable that some regions in Slovakia had limited or no highways. The positive attitude towards the Project's implementation were connected to reasons such as:

- development of tourism;
- shortening the distances between the cities;
- better accessibility;
- regional development;
- improved safety ;
- reduced journey times;
- higher mobility of the labour force;

- secondary construction of associated infrastructure;
- positive impact on the local environment in the cities and villages; and
- encouraging domestic and foreign investors.

Attitudes towards the construction phase were generally evaluated as less positive than for the operation phase of the Project. Some negative attitudes towards the Project could be found locally, namely in areas that would be located near the route of the Project. People from the adjacent areas were expecting some negative effects on their local environment, namely relating to dust, noise and emissions. These are mitigated by the measures proposed in the EIAs and in more detail in the permits, the DUR and DSP, and the Concession Agreement.

7 Existing Environment and Social Context[10]

Dubná Skala - Ivachnová
The three sections between Dubná Skala and Ivachnová are located in the Žilina region, which is a popular tourist destination due to its rural character and its proximity to the mountains.

The area is divided between two main features namely the Turčianske Basin on the western side and River Váh valley on the east. The mountain areas of Velka and Mala Fatra, which are both designated European protected areas (Natura 2000), are located on either side of the Project. The natural border between the basin and the valley is formed by the Kapeľany dam. The structure of the basin is typical for the central Carpathian Basins. The area contains settlements, agriculture and industrial areas, and transport routes. The main industrial areas are situated around Sučany and Turany.

The River Váh has a significant ecological value and is registered as an area of European Importance (Natura 2000). Existing significant infrastructure elements in this region include the I/18 highway and the railway which connects Kosice with Žilina.

The region is primarily agricultural, dominated by meadows and pastures used for grazing of livestock. Smaller fields used for growing crops occur in close proximity to settlements. Šútovo quarry is also a characteristic feature in the area.

The main populated areas and associated public activities along the route are concentrated in settlements along the River Váh. The area along the route comprises of 102 villages with a total of 201,853 inhabitants (refer to Table. 2.3.1 of the SIA). It is estimated that approximately 16.1% of the population migrate for employment (32,668).

Jánovce – Jablonov
The route leads from the west to the east between Levočský Hills (Levočské Vrchy) in the North, Slovakian Paradise in south-west and Volovsky Hills (Volovské Vrchy) in the south. The route passes close to the castle Spissky Hrad, which is listed on the World Heritage list – UNESCO. The area is not highly populated, there are two main towns in the area - Spišská Nová Ves lies approximately 10km south from the route; and Levoča, which will be bypassed by the proposed route. This section of the Project connects to the highway "Mengusovce – Jánovce" which is currently under construction.

The main populated areas are villages along the main existing highways. The catchment area comprises of 99 villages with a population of 187,157 (refer to Table. 2.3.1 of the SIA). It is estimated that approximately 14.5% of the population migrate for employment (26,336).

Fričovce – Svinia
The proposed motorway connects to the Fričovce bypass, which is already in operation; it then passes mainly through the rural highland area. In some sections the landscape has a high mountain character which includes very steep slopes with small streams at their base. A significant part of the proposed scheme is located in a narrow valley of the River Spinka. The third largest city in Slovakia, Prešov, is located 10km east of Svinia.

The main populated areas in this section are villages along the main existing highways. The catchment area comprises of 53 villages with a total of population of 150,479 (refer to Table. 2.3.1 of the SIA). It is estimated that approximately 10.2% of the population migrate for employment (15,037).

[10] Details of the existing environmental and social baselines are described in the EIA documentation (ref: EIA studies: Martin to Ľubochňa; Jánovce to Jablonov and Fričovce to Prešov: Part C Section II) and SIA documentation (ref SIAs: Dubná Skala - Ivachnová, Jánovce – Jablonov and Fričovce – Svinia).

8 Environmental and Social Impacts and Benefits

8.1 Cumulative environmental and social impacts and benefits of D1 corridor (as a whole)

The Strategic Environmental Assessment (SEA) was prepared to assess the Slovak Operational Programme for Transport 2007 – 2013 (OPT) which includes the Project. The conclusions of the independent evaluation of the SEA are as follows:

- The OPT will have a positive influence on the environment of urbanised areas of Slovakia;
- The OPT will not have a significant negative impact on the protected natural environment and landscape;
- The potential negative impacts of the OPT on the natural environment were evaluated. At the SEA level it was not possible to eliminate these potential negative effects partly as more ecologically sensitive alternatives to the transport corridors were limited;
- That at the EIA level mitigation would be identified for these negative effects which was not possible at the strategic level of assessment.

8.2 Environmental and social impacts and benefits of the Project

The proposed Project involves the construction of a dual-2 lane (2+2) motorway and its associated connector roads and infrastructure. The Project will be constructed according to Slovak and EU environmental requirements. A summary of the primary environmental and social impacts and benefits is provided below; mitigation measures are described in section 9 of this report.

- **Impacts on the quality of life:**
  The following potential impacts on the quality of life have been identified:
  - Slight negative impacts during construction from disturbance and restrictions on local traffic.
  - Severance effects may arise but these will be of a moderate negative nature and will be mitigated where practicable by the provision of crossings.
  - Opportunities will arise for direct employment. During the construction period this is estimated as approximately 35 workers/km, during the operation period opportunities at maintenance depot facilities and rest areas will arise.
  - Due to the potential reduction of traffic on the existing roads and the improved standard of the Project Road benefits are predicted to the quality of life to those living adjacent to the existing roads.
  - Increase of commercial activities possibilities are expected (e.g. supermarkets).
  - Demolitions- refer to table below:

Section	number of demolitions	number of houses	number of people affected
Dubná Skala-Turany	30	5	19
Turany-Hubová	1	0	3
Hubová-Ivachnová	0	0	0
Jánovce-Jablonov	0	0	0
Fričovce-Svinia	1	0	1

- **Accident Reduction:**
  The proposed routes are predicted improve safety by moving traffic out of towns and villages and also by the provision of a dual carriageway which is more suited

to the volume and nature of the traffic using this route. For the proposed routes the percentage reduction in accidents in the opening year is estimated to be :[11]

Dubná Skala – Turany	36,9%
Turany – Hubová	53,8%
Hubová – Ivachnová	84,4%
Jánovce – Jablonov	59,0%
Fričovce – Svinia	30,3%

The Project also includes service/rest areas on both sides of the carriageway. As well as providing the opportunity for drivers to refuel their vehicles these also provide amenities to allow drivers to eat and rest. These service areas are located in line with the government's strategic plans.

- **Impacts on Public Health:**
  The following impacts on public health in the affected communities along the road route have been identified:
  - Where traffic levels on existing roads are reduced due to the transfer of traffic onto the new road there may be improvements in the quality of the environment along these existing roads, including improvements to the current noise and air quality.
  - *Noise:* The road will encroach upon a few settlements resulting in localised slight negative impact on the noise environment. It is estimated that noise barriers will be necessary at certain places as identified in EIAs and the permitting documentation. The design, in line with Slovak legislation, requires that barriers are required to ensure that the permitted noise limits will be maintained along the new route. The Project will have a positive impact on reducing the noise levels in a number of cases when compared to the zero variant. For instance it is estimated there will be a reduction in traffic noise levels for approximately 40% of inhabitants in the Jánovce – Jablonov section who are currently affected by traffic noise.
  - *Air Quality:* Overall, the Project is expected to improve air quality in a number of cities, towns and villages along the route by diverting transit traffic away from those locations and through reduced congestions. Where the new road encroaches upon settlements there may be localised minor negative effects on air quality.

- **Impacts on the Raw Materials:**
  It is predicted that the sourcing of aggregate and other raw materials for the Project Road construction will have insignificant effects on the mineral deposits which are associated with the construction of the road. Use of existing mineral deposits rather than opening up new sources is set out as a priority and forms part of the construction contract. Infilling of the mined areas with appropriate site won material, either due to the material being excess to requirements (i.e. from the tunnels) or not having the appropriate material properties, is also to be considered.

- **Surface and ground water impacts:**
  Contaminated run-off during the operation of the road has the potential to have a slight negative effect on surface and groundwater resources. This will be mitigated by the pollution control and filtration systems which are included in the Project proposals and form part of the Project's auditable environmental mitigation requirements.

- **Impacts on land-use:**
  The Project will involve the construction of a new road which will require permanent land take resulting in an important negative impact on land-use. The estimated temporary land required to construct the Project, e.g. for haul roads, construction yards and access, is identified as potentially resulting in a slight negative effect on land-use due to its short-term nature.

[11] Taken from Section C of the DURs.

- **Impacts on flora:**
  The Project will result in the removal of trees and partial loss of habitats, including vegetation along watercourses, giving rise to some negative effects. Protected area will be affected, refer to the Natura 2000 section below for further details. The construction and operation of the new road sections may result in the potential for some contamination of flora; mitigation measures are proposed in the EIAs and permits.

- **Impacts on fauna:**
  The following potential impacts have been identified on fauna:
  - Cutting through migration routes;
  - Partial barrier effect;
  - Partial destruction and fragmentation of habitats;
  - Dust emissions during construction;
  - Changes to the noise and air quality environment; and
  - Contamination of soils.

  Measures to mitigate these impacts have been included in the Project's design and negative effects are predicted to be of a moderate nature overall.

- **Natura 2000**
  The road corridors were developed to avoid and minimise encroachment into protected areas known at the time of the EIA studies. The EIA studies were prepared before the full implementation of the Habitats Directive (SK Act 543/2002) and prior to the Natura 2000 list of protected sites proposed by the Ministry of the Environment (MEnv SR). Whilst the EIAs do not specifically address the Project's impacts on the designated Natura 2000 sites the impact on the nature conservation condition of the sites along the route were assessed during the EIA, their actual condition did not alter due to the declaration of the Natura 2000 network in Slovakia.

  During and following the definition of the Natura 2000 sites in Slovakia various studies have been undertaken in relation to the Project's impact on all these designated European sites. In 2004 a study was prepared on the relation of the proposed motorways and expressways, which included to Project, on the proposed Natura 2000 network in co-operation with the nature conservation authorities. This study was updated in 2008 in connection with the proposed completion of the designation of the sites for the Natura 2000 network in Slovakia.

  In discussion with the competent Slovakian authorities it was agreed that, for the Turany to Hubová section, an additional assessment of the impact of the proposed route on Natura 2000 sites (Creative, spol. s.r.o. 11/2007) would be prepared as a part of the project documentation. Further, for the other sections of the Project, additional assessments were not required and the declarations from the competent Slovakian authorities were prepared which confirm that no significant effects will occur to Natura 2000 sites. [12]

  The assessment of impact of the Turany to Hubová D1 motorway on the Natura 2000 network was executed according to the methodology set out in the MEnv SR guidance document [13]. The assessment described and evaluated in detail the impacts on particular Natura 2000 sites and mitigation measures were recommended which have been transferred, after the consultations with competent institutions of nature protection, into the technical solution as a part of the detail level of project documentation during the permitting for the Project – DSP (DOPRAVOPROJEKT, a.s., 2008). The assessment of the significance of any impact of the proposed D1 Turany – Hubová on the Natura 2000 sites (prepared

[12] Refer to Natura 2000 Declarations
[13] 'Assessment of plans and projects with significant effects on the sites of the Natura 2000 network – Guidance document on the provisions of Articles 6(3) and 6(4) of the Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora', Ministry of Environment of the Slovak Republic, 2002.

by the company Creative, s.r.o. in November 2007) was submitted to Ministry of Environment and according to expert evaluation (letter n. 49234/2007-SOPK, 6.12.2007) if the proposed mitigation measures are implemented the evaluated variant of D1 section Turany – Hubová will have no significant impact on Natura 2000 sites. The relevant competent Slovak authority (the State Nature Protection Authority) has also stated that construction of the Project is not contrary to interests protected by law and based on the implementation of the agreed mitigation measures (for more information see section 9: Mitigation Measures) it is not to be considered as having an impact on the locality which can give rise to significant changes to the biological diversity, structure and function of the ecosystems.

Further evaluation reports have been drawn up for the affected sites of the Natura 2000 network; the impacts on these are summarised below:

- **ÚEV Malá Fatra:** the Project will negatively effect the forest habitats however between only 0.05% to 0.16% of the total area of habitat will be affected and assuming measures are implemented the overall impact would be insignificant. Negative effects are anticipated on animals and their associated habitats, the most severe in relation to the fragmentation of the habitats in the Kraľoviansky meander. However with implementation of mitigation measures, such as underpasses for animals (see Section 9) these effects will become insignificant.

- **ÚEV Veľká Fatra:** the Project will affect the migration corridor of certain species, particularly large carnivores, between the mountains of Veľká Fatra, Malá Fatra and Chočské vrchy. However with the implementation of mitigation measures, such as underpasses for animals (see Section 9) these effects will become insignificant. The Project will negatively affect the forest habitats however approximately only 0.03% of the total area of habitat will be affected and considering the rather poor condition of the habitat in the areas of the D1 route it is considered these effects would be insignificant. The most potentially severe impact of the Project is on possible changes to the water regime and the effect of this on the peat bogs, PR Rojkovské rašelinisko. However based on the findings of a hydrogeological study and assuming mitigation measures are implemented the effects are not regarded as significant.

- **ÚEV River Váh:** the Project will give rise to loss of protected habitats and effects on animals from fragmentation of the whole river into segments from the introduction of the new crossings of the river by the Project in 3 new locations. Both the habitat loss and fragmentation effects on animals are potentially significant but with implementation of mitigation the significance of these effects will reduce.

- **CHVÚ Malá Fatra:** the Project will reduce the nesting opportunities for selected bird species in the vicinity of the route and increase disturbance on nesting birds. However it is predicted that the disturbance will not be significant.

- **Impacts on the Landscape:**
  Visual impacts on the landscape specifically associated with the Project's earthworks and bridges are predicted to have a slight negative effect on the scenery. The road will create a barrier and a new artificial element within the natural landscape. Measures to mitigate these impacts (such as planting to ensure better incorporation of the roads into the landscape) have been included in the Project design.

- **Impacts on Cultural Property**

  Assessments of the Project's impacts on cultural property have been conducted in accordance with relevant provisions of Slovak laws, regulations and protected area management plans. The proposed Project's route crosses some potential archaeological sites. Therefore it will be necessary to execute rescue archaeological exploration in the localities specified in the relevant documentation. Identified archaeological localities are Sučany – Skalka, Šútovo – Boroviny, Kraľovany – Hradisko. Associated with the anticipated development of the region will be an increase in the interest, and hence visitor rate, to the ruins of the Likavka Castle and the historical buildings in Ružomberok. The antiquities in the area adjacent to the D1 Project route won't be affected by the construction or maintenance of the Project, although there could be some impact on some road side shrines. Mr. Grešo's shrine (near Spišský Štvrtok), which is located directly on the D1's route, will be relocated by its owners. Spišský Hrad (castle), which is listed on the World Heritage list of UNESCO, will not be affected by either the permanent or temporary works.

  Additional archaeological research, including field studies (realized by Archaeological Museum SNM, term of works in field: 16.7. – 5.9.2008), were undertaken as a part of the ongoing project documentation. The increased level of information gained from the additional research has reduced the number of potential archaeological sites that the Project could impact upon and hence require to be assessed as part of the implementation of the Project.

- **Impacts on the Urban Environment:**
  - *Urban Areas:* Visual impacts upon the urban areas are predicted to be sufficiently mitigated by the use of screen planting.
  - *Agricultural:* The majority of the land take associated with the Project is agricultural land. Slight negative effects on agricultural land are identified from the permanent and temporary land take, soil fund violation and due to the potential for contamination to agricultural soils to arise. Severance effects will be mitigated due to the bridge proposals or the re-routing of field access roads.
  - *Industrial:* Large benefits are predicted to the industrial sector from the improved connection with the international highway network and the cost savings and reliability associated with a decrease in congestion. Development of industrial activity has been identified as one of the important potential benefits arising from the provision of the new road. A positive impact on the development of industry is expected.
  - *Traffic:* Improved interconnectivity and capacity delivered by the new road are predicted to provide large benefits to vehicle users in terms of decreased journey times and a decrease in the accident rate. Slight adverse effects on vehicle travellers are predicted during construction but these will be of a short term nature.
  - *Tourism:* The Project is identified as having the potential to support the development of the tourism sector.
  - *Forests:* The Project will result in a small amount of land take from forestry areas predicted to give rise to a slight negative effect.

- **Community Impacts:**

  There is a high expectation that by bringing the Project routes into operation the road traffic accidents and highway congestion will significantly decrease and traffic policing will improve vehicle and travellers safety which will be of significant benefit. The environment of the towns and villages in question is expected to be enhanced by the reduction in congestion whilst connectivity within the wider community is maintained by the junctions off the D1 and by the maintenance of existing highway routes. The development of the region is likely to accelerate and the accessibility of the particular parts of Slovakia should be improved.

9 Mitigation Measures

It is considered that the predicted negative impacts can be sufficiently mitigated by various measures, which are set out within the Section IV of the EIAs and further detailed in the subsequent permit documentation and the Concession Agreement. The key mitigation measures are summarised below:

- **Impacts on the quality of life:**
  - *Construction Traffic*: The Building Permit stipulates certain conditions in order to avoid negative impacts on neighbouring properties during the construction phase. These include the requirements to ensure that the haul routes are kept clean of construction related debris; to agree access routes with local municipalities to limit interference with other users and owners etc.; to agree the location and time of temporary road closures; to clearly sign and advertise all diversions and road closures; and the reconstruction of roads damaged by the construction traffic but which are needed to access the site.
  - *Severance effects*:
    - Existing routes are in the most cases realigned where they are severed by the Project.
    - Where land is severed to the extent that it becomes unworkable the land owner has the option to require the investor to purchase the complete parcel.

- **Accident Reduction:**
  - The likelihood of road accidents occurring is minimised initially by the design and approval of the works to specific Slovak standards and also by the safety inspections that are required to be undertaken by the relevant authorities, including the police, prior to a preliminary road opening certificate being granted.
  - The Concessionaire is incentivised to minimise accidents on the road by specific measures included within the payment mechanism.

- **Impacts on Public Health:**
  - *Noise*: noise barriers will need to be provided in specific areas, which have been identified in the EIA and permit documentation, to ensure noise levels will be within allowable limits; Tables of the noise barriers required and which municipalities will be affected are contained within the EIA and Permit requirements. Post construction noise assessment will be carried out to determine the effectiveness of the barriers.
  - *Air Quality*: Air pollution caused by vehicles in the operation period will be mitigated by tree planting within the road corridor. Measures during the construction period include maintaining the approach roads in the dust-free state by regular cleaning of the access roads and by damping down the site to suppress dust.

- **Impacts on the Raw Materials:**
  - All deposits and quarries supplying the Project will be required to be managed in compliance with Slovak and EU environmental legislation so as to mitigate their environmental impacts.
  - Road material sourcing will be mitigated through strict compliance with Slovak environmental legislation and contractual conditions relating to the opening of borrow pits and quarries.

- **Surface and ground water impacts:**
  - Impacts on the surface and ground water regime will be mitigated by the drainage systems implementing pollution control measures (for example oil separators, interceptors, filtration etc).
  - Emergency procedures for dealing with accidental spillage from vehicles will form part of the Concessionaire's environmental management plan.

- **Impacts on land-use:**
  - The impact on land use is mitigated by the route selection procedure and by the design, e.g. the use of retaining walls.
  - Impact on agricultural soils and land will be minimised by limiting the use of agricultural land outside of the works area, measures to reduce the potential for contamination of soil due to contaminated run-off, and the requirement for temporary plant and waste to be stored only on land of low quality soils.
  - Impacts on deposit areas will be eliminated by their re-cultivation upon completion of the construction works.
  - Elimination of impacts on agricultural production will be accomplished by realigning the field access roads, technical measures against soil erosion, implementation of a vegetation skirt against vegetation damage caused by bark scorch and wind.

- **Impacts on flora:**
  - Compensation and revitalisation of planting to limit effects of habitat loss using native vegetation, for example along watercourses and on embankments. The relevant nature protection authorities will be consulted on the selection of the species.
  - Trees in close proximity to the construction site will be protected from damage to their roots and trunk by control of construction and construction traffic, and fencing or other forms of barriers.
  - Loss of flora is further mitigated by either compensation planting or by a compensation payment whereby monies are paid to the relevant authority to carry out planting or revitalisation.
  - Reconstruction of bank vegetation will be implemented.

- **Impacts on Fauna:**
  - Impacts on fauna will be mitigated through the provision of animal passages, and through appropriately designed bridges, underpasses and culverts.
  - Removal of trees will be undertaken exclusively outside the breeding season unless specific authorisation is granted following an inspection by an authorised expert.
  - Elimination of animal's intrusions into the road area will be attained by the proper fencing.
  - Frosted walls and enhanced safety fences will be utilised as barriers for birds and bats at the bridge objects and scaffold bridges.

- **Natura 2000**
  - The document 'Assessment of the importance of effects of the proposed D1 Turany – Hubová on Natura 2000 sites' identified measures which are necessary to attain mitigation of impacts on the Natura 2000 sites. These measures were implemented into the DUR and DST designs and were subject to Zoning Permit and Building Permit processes. Both measures for mitigation and measures for enhancements to biodiversity are included within the works and include, but are not limited to, the following:
    - Provision of optical barriers on bridges and elevated roads for birds (e.g. non-transparent walls, elevated crash-barriers)
    - Impacts on animals arising from fragmentation of habitats and migration corridors will be mitigated by the provision of animals passes, such as underbridges designed for animals and eco-ducts over the road (e.g. overbridges). Access routes for animals to the Váh will also be provided.
    - Continuous and solid road fencing will be provided to prevent access of animals onto the road where they may be at risk of collisions with road users.
    - Bridges over the Váh will be designed to limit piers being erected in the course of the river.

- Protective measures will be implemented to prevent changes and contamination to the water regime, particularly to prevent effects on the sensitive peat bogs.
- Creation of replacement breeding habitats for amphibians and construction of passages for amphibians.
- Monitoring of invasive species during construction and ensuring the safe removal and suppression of any identified invasive species.

- **Impacts on the Landscape:**
  - Planting is proposed as one of the mitigation measure to assist in the integration of the road into the landscape.
  - In the places of animals migration routes planting will be designed along road fencing to direct them under the bridge objects.
  - Design to be, where applicable, sympathetic to its environment.

- **Impacts on Cultural Property**
  - To protect cultural property from adverse impacts during the construction period a "*chance find procedure*" will be followed to ensure that provisions are in place for managing any cultural objects that are encountered. Procedures, which are required to be approved prior to the commencement of the construction phase, shall include fencing off the area of finds to avoid further disturbance and an assessment by a designated and qualified specialist to identify necessary protective actions consistent with Slovak legislation.

- **Impacts on the Urban Environment:**
  - Visual impacts upon the urban areas are mitigated by the use of screen planting.

- **Unexploded Ordnance:**
  - Any ordnance uncovered during the works will be dealt with by the relevant authority. Standard provisions included within the Concession Agreement set out the responsibilities should the unlikely event of ordnance being uncovered arise.

- **Community Impacts:**
  - *Construction Nuisance*:
    - The impact caused by the construction works is mitigated by the implementation of agreed transport management plans and working hours. These include plans for transporting the construction materials and will be prepared with the co-operation of the local authority. The allowable routes and vehicular speed will be limited and temporary traffic signs will be placed, where necessary the detours will be recommended and advertised.
    - Local roads used for the construction traffic will be cleaned and maintained regularly, and reinstated into the original condition / state where relevant.
    - The design attempts to balance the amount of fill required in the embankments with the excavated material won on site to minimise the amount of material that will need to be imported or exported.
    - The locations of site compounds form part of the permitting process; any new compounds would require the permission of the relevant authorities.

In addition:

- A Construction Management Plan prepared by the Concessionaire will include details regarding the environmental protection.
- A Waste Management Plan will be prepared by the Concessionaire.
- A plan to deal with an emergency situation that can affect the environment will be prepared by the Contractor / Concessionaire and approved by the

Slovak Environmental Inspection and Environmental Inspectorate Bratislava, Department for Water Protection Inspection.

- The compensation arrangements for land take set out under Slovak law are applicable to the Project. Approximately 80% of the land has already been acquired already on a voluntary basis to minimise the need for compulsory expropriation with negotiations still ongoing for the remaining parcels. Potential impacts to properties were minimised by aligning the road where possible outside of built up areas.

Additional Environmental Studies During Permitting:
In order to assist in the discharge of the requirements of the EIA and to provide details of any further mitigation that needs to be incorporated into the permits and design requirements additional studies have been undertaken as summarised below:

- Geological studies
- Noise studies
- Air quality studies
- Archaeological studies
- Agricultural Soil studies
- Seismic studies
- Economic Study

Further details of the existing environmental and social impacts and benefits of the Project as well as the proposed mitigation measures are contained in the EIA documentation. In 2008 Social Impact Assessments were undertaken regarding the Project.

Subsequent to completing the EIA process for the Project studies, following the definition of the Natura 2000 sites in Slovakia, between 2004 and 2008 various studies have been undertaken in relation to the Project's impact on these designated European sites, these are detailed in the table on Pages 11 and 12 under *Subsequent Studies and Opinions*

The concession agreement requires that a comprehensive mitigation plan will be developed and implemented by the Concessionaire as part of their Environmental Management Plan. The mitigation measures will be updated and amended based on the results from additional studies and Project monitoring results.

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10 Monitoring

The conditions for monitoring are detailed in the EIA; the DUR and DSP documentation also contain detailed monitoring requirements. The conditions include monitoring of the impact of the Project on selected areas of the environment in defined areas of the route during the different stages of preparation, development and operation of the road.

Monitoring should especially focus on:

- monitoring influences on geology – stability and erosion of slopes, object deformation;
- geotechnical monitoring of rehabilitation measures;
- monitoring of air quality in the locations identified in the EIA and permits;
- monitoring of climate;
- monitoring of influences on surface and underground waters;
- monitoring of waste waters quality;
- hydrogeological quality and quantity monitoring of each water sources;
- biota monitoring;
- monitoring of noise conditions especially in problematic locations from the point of influencing the population by motorway in course of construction and motorway operation;
- monitoring of seismic effects on the neighbouring buildings especially in course of construction;
- preparation of inventory of building facts near the construction site before motorway construction;
- monitoring of oil separators and other parts of the highway runoff drainage system; and
- monitoring of accidents, near misses and non-conformances with the Quality System including the EMS.

Compliance monitoring reports will be required from the Concessionaire both during and after the construction phase; these will be submitted to the relevant inspection authority. If monitoring results establish that the actual impacts of the assessed activity are worse than stated in the assessment report, then the Concessionaire is obliged to implement remedial measures to establish compliance with the impacts predicted in the original assessment report. Post construction monitoring, such as water quality and noise assessments, continue after opening of the road to the public.

The SIA recommended steps to monitor real social impacts during construction and after construction (i.e. the independent monitoring of implementation of recommendations, for example by monitoring the media and cooperating with the mayors), which are also aimed to eliminate the risk of impacts on vulnerable groups. Moreover, it will be necessary to inform the public through interactive workshops about different situations and possible measures which may occur during the construction.

11 Project Update

The building permits for all sections of the D1 have been issued and are valid and effective.

The majority of the land for the D1 has already been voluntarily acquired.

It is anticipated that Financial Close will occur within the first quarter of 2010. The start of the main construction activities will commence once the detailed design is completed and approved. It is anticipated that the first sections will be open in spring 2012 (sections 4 and 5) with the remaining sections opened in the autumn of 2012 or the early part of 2013.

12 Contacts

Further information on the Project can be found at:

Ministry of Transport's website
www.telecom.gov.sk (PPP Projects section)

Contact person: Ing. Ľuboslav Gajdoš, PhD.
(luboslav.gajdos@telecom.gov.sk

Communication center „North" located in Žilina
PPP Project D1 Dubná Skala – Turany, D1 Turany – Hubová, D1 Hubová - Ivachnová

Contact information:
Národná diaľničná spoločnosť, a.s.
Námestie A. Hlinku 3
010 01 Žilina
sever@ndsas.sk
contact person: Ing. Marcel Ondráš 0911 770 180

-project PPP D1 Jánovce – Jablonov D1 Fričovce – Svinia:
in charge of the Communication Center "East", temporarily:
Ing. Marcel Ondráš – 0911 770 180, marcel.ondras@ndsas.sk
After the opening of the Communication Center "East" located in "Košice" the agenda will be carried out by the local employee of this Center.

For any queries relating to land acquisition please contact:
Ing. Monika Nekolová
Email: monika.nekolova@ndsas.sk
Mobile phone: 0910/905 003

Ing. Tomáš Pollák
Email: tomas.pollak@ndsas.sk
Mobile phone: 0903/254 060