Power line rated 2x400 kV Bystričany locality – Horná Ždaňa

FINAL RECORD

(2110/2013-3.4/ak)

issued by Ministry of Environment of the Slovak Republic according to § 37 of the Act no. 24/2006 Coll. on Environmental Impact Assessment and on Amendments to Certain Acts

BASIC INFORMATION ABOUT THE PROPONENT

1. Name

Slovak Electricity Transmission System, Plc. (SEPS, a.s.)

2. Identification number

35 829 141

3. Seat

Mlynské nivy 59/A, 824 84 Bratislava

II. BASIC INFORMATION ABOUT THE PROPOSED ACTIVITY

1. Name

Power line rated 2x400 kV Bystričany locality – Horná Ždaňa

2. Purpose

Construction and operation of 2x400 kV power line between Bystričany locality and 400 kV Horná Ždaňa distribution point

3. User

Slovak Electricity Transmission System, Plc.

4. Location

District:

Region: Trenčín

Municipalities: Veľké Uherce, Pažiť

District: Prievidza

Municipalities: Oslany, Horná Ves, Radobica

Region: Banská Bystrica

District: Žarnovica

Municipalities: Veľké Pole, Píla, Župkov, Hrabičov

Partizánske

District: Žiar nad Hronom

Municipalities: Bzenica, Dolná Ždaňa, Horná Ždaňa

The detailed description of the route of proposed power line is stated in the chapter II/6 of Final Record.

5. Date of start and finish of construction and operation of proposed activity

Date of start of construction: 2015
Date of finish of construction: 2016
Date of start of operation: 2017

Date of finish of operation: not specified

6. Brief technical and technological description

Basic description

"2x400 kV line Bystričany locality – Horná Ždaňa" is the part of 1st part of Complex of constructions "Transformation of 400/110 kV Bystričany". It also represents 2nd phase of construction of new 2x400 kV connection Horná Ždaňa – Bystričany – Križovany. Its connection to the 1st phase of "Power line rated 2x400 kV Križovany –Bystričany locality" is proposed in the area of municipality Veľké Uherce. The general direction of the first half of route is south-eastern, eastern of the second half. This route ends in DP Horná Ždaňa.

The route of power line is proposed in variants. Depending on individual variants, it has the length from 29.7 to 31.2 km and the number of towers from 113 to 127, from that 17 - 27 break point towers and from 86 to 110 load bearing towers. Towers are of the 2x400 kV SÚDOK type (basic height of 48 m). Proposed foundations for the towers are concrete, wall or foot, or monolithic ones with the depth of founding of 2-3 m and the soil occupation from (8.5 x 8.5) m^2 to (14 x 14) m^2 . For the phase conductors it is proposed to use 2 x 3 x three-bundle of wire AlFe 455/74 in the whole length of route. The objects making DS visible are proposed for conductors.

The route of proposed power line is divided to 5 sections, some of them are proposed in variants.

section 1: Veľké Uherce - Banská

This section is proposed in three variants:

HV1:

The route of HV1 variant (the original route from the Preliminary Environmental Study) starts by connecting to the route of 1st phase - 2x400 kV line Križovany – Bystričany locality along the road 1/64. The connecting of line to the first stage is located southward from the road 1/64 (in cadastral area Veľké Uherce). The route further leads south-eastwards through bigblock arable soil along the road 1/64 and then (not changing the direction) along the road 11/512 to the edge of forest. There the line enters the edge of Tríbeč mountain, or the edge of CHKO Ponitrie and leads through the edge of forest growth broken several times by the areas of permanent grass growth in the length of circa 2 km. In cadastral area Horná Ves it goes out of the forest, crosses the local brook (Pažiťský brook) and bypasses the built-up area of municipality from south-western side. Then it leads through the undulated agricultural landscape with scattered non-forest tree vegetation, crosses the road III/5121 and enters the cadastral area Radobica, where it connects to the existing corridor of dismantled 220 kV V240 line.

In cadastral area Radobica the route enters the highland relief with alternating forest and agricultural areas with non-forest tree vegetation, with typical diffused settlements called "štále". The route in the course of dismantled 220 kV V240 line crosses the road 11/512 still in south-eastern direction and closely bypasses the settlement Cerová in cadastral area Radobica from northern side. It also bypasses the settlement Banská, where it enters the route of parallel corridor of the dismantled 2x110 kV line V7741/7742.

<u>HV2:</u>

New HV2 variant bypasses the built-up area of municipality Horná Ves from north through agricultural soil. Its route starts the same as in HV1 variant by connecting to the route of 1st phase - 2x400 kV Križovany – Bystričany locality line near the road 1/64 in cadastral area Veľké Uherce. It leads directly eastwards through cadastral area Pažiť and further through cadastral area Oslany, and crosses the road 11/512 and Pažiťský brook and leads through arable soil next to the motor-sport area Oslany, behind which it crosses Osliansky brook.

Then in the Tehelňa locality the route changes the direction to south-east and leads along the small oak forest on agricultural soil to the settlement Rudica. Southward from its built-up area it descends to the bottom land of Osliansky brook, from where it ascends again and after crossing the brook Cerová it connects to the route of dismantled 2x110 kV line V7741/7742, from where it leads in concurrence with the existing 2x110 kV line V7747/7747 through Radobická valley along the road 11/512 mainly through forest lands. Northward from settlement Cerová the route leaves the forest and leads through agricultural soil (almost concurrently with HV1 variant) between the scattered dwellings of settlements Cerová, Hvojníkovci and Banská.

HV3:

The third variant of bypass is the combination of previous variants so that from the connection to the 1st phase, the route would lead in the route of HV1 – i.e. southward from Horná Ves along the road 11/512, and behind the municipality southward from agricultural cooperative area the route would divert more eastwards, crossing the areas of arable soil in Dlhé hony locality, the edge of forest growth Chlmok and Osliansky brook and mainly bypassing the settlement Rudica. After connecting to the corridor of 2x110 kV line it continues through Radobická valley as the HV2 variant.

section 2: Banská - Tomášov Štál

This section is proposed in three variants:

<u>VP1</u>:

From the settlement Banská the route of VP1 variant (the original route from the Preliminary Environmental Study) continues in the route of dismantled 2x110 kV line V7741/7742, in which it leads through forest and meadows alternately. Under the elevation point Stráž in unchanged direction after leaving the route of dismantled line it crosses the road 11/512 before the municipality Veľké Pole, behind which it changes the direction to east and bypasses the built-up area from south. After breaking the route by the quarry above the municipality the route descends in forest growth to the road 11/512, before crossing of which it again connects to the corridor of dismantled 2x110 kV line. Then the route leads over Šmeckov štál directly eastwards in cadastral area Píla. There it definitively leaves Tríbeč and goes on in Vtáčnik mountain in the same type of forest-meadow landscape, where it leads between the settlements Horní Jakálovci, Švarcovci.

VP2:

New route of bypass of Veľké Pole - VP2 variant – is based on the need to respect the exclusive deposits of building stone near the municipality southward from the road 11/512. From the original route (VP1) the route diverts southward from Stráž hill in the Koreniská locality after leaving the route of dismantled 2x100 kV line more eastwards, leads through the agricultural soil with non-forest tree vegetation closer to the built-up area of municipality, crosses the road 11/512 above the agricultural cooperative area, which it bypasses from north, and also from south it closely bypasses the graveyard and enters the beech forest located under the quarry. From there the route descends to the road 11/512, after crossing of which it connects to the original route of dismantled 2x110 kV V7741/7742 line and continues like VP1.

VP3:

From the settlement Banská, the route of VP3 variant leads southwards in its whole length entirely in concurrence with the existing 2x110 kV line V7747/7747, it goes through highland landscape with the mosaic of structures of pastures, meadows, non-forest tree vegetation and forests behind the elevation point Stráž. Without change of direction the route bypasses the settlement Ondrášov štál from north, from south settlements Angelt and Gregorov štál and from north also the built-up area of Veľké Pole. In the locality Čiernovodský kopec the route changes the direction more to east, bypasses Šmeckov štál from north, from south it bypasses Škriniarov and Matiášov štál and Paglovci settlement. From north the route

bypasses settlements Horní Jakálovci, Švarcovci and Tomášov štál, where it meets the route of VP1.

section 3: Tomášov Štál - Hrabičov

This section is proposed in one variant:

The route leads from Tomášov stál in Vtáčnik mountain in the corridor of dismantled 2x110 kV line V7741/7742 and also in the route next to the existing 2x110 kV line V7747/7747. The route bypasses Pischlov Štál from north, leads southward from settlement Belanovci, and from north bypasses closely Frtálov hill in cadastral area Župkov. Before the municipality Hrabičov above the locality Horné Pecné the route leaves the course of 2x110 kV line, changes the direction to south-east, leads under chalet, crosses the road of III. class, where it approaches the southern border of built-up area of municipality and ends in Kosorky locality.

section 4: Hrabičov - Kristiánovci

This section is proposed in two variants:

HR1:

The route of bypass of Hrabičov of HR1 variant (the original route from the Preliminary Environmental Study) leads from Kosorky locality breaking the route to north-east directing to the settlement Vicianovci, while it runs on the hill through pastures between municipality Hrabičov and settlement Vicianovci. Soon it connects back to the corridor of 2x110 kV line, changes the direction more to east, enters the forest, crosses the ridge and leads between settlements Kristianovci and Horní Zajacovci and descends into the valley Nebojsa (cadastral area Bukovina, district Žarnovica, Banská Bystrica region).

<u>HR2:</u>

Alternatively proposed bypass of Hrabičov - HV2 variant continues from locality Kosorky in unchanged south-eastern direction to the settlement Pančuškovci, which it bypasses from north. There the route changes direction to north-east and goes through upper part of forest growth "Mikušová", to bypass and also eliminate the visual impact of route from settlement Čierťaže. The route then goes through the ridge in the saddle between settlement Čierťaže and settlement Kristianovci, behind which it descends to the valley Nebojsa (cadastral area Bukovina, district Žarnovica, Banská Bystrica region) and again it connects to the route of 2x110 kV line.

section 5: Kristiánovci - Horná Ždaňa

This section is proposed in one variant:

This section leads from settlement Kristiánovci in the route of dismantled 2x110 kV V7741/7742 line, or along existing 2x110 kV line V7747/7747 through forest growth descending to the mouth of valley Nebojsa above the settlement Bukovina in cadastral area Bukovina pri Bzenici, where it, already in Žiar basin, leaves the landscape of forest character, breaks to north-east and enters the common corridor with 400 kV line V492. In cadastral area Dolná Ždaňa the route changes the direction to north to DP Horná Ždaňa, where it ends.

Technology of construction

The main construction yards will be localized by both end points of corridor - by ES Horná Ždaňa and in the locality of connecting into 2x400 kV line of 1st phase, or in the area of ES Bystričany. By progressing construction the construction yards will be moved - further localities of construction yards will be located in the suitable areas in particular sections of the line (their localization will be specified in further phases of project documentation).

The construction work will be realized in the corridor of proposed line. The access of construction machines into the corridor will be realized through selected access communications, which will be primarily current existing local communications, field and forest roads. Since the new 2x400 kV line is routed also in the concurrence with other lines (400 kV), its construction – installation of towers and wires will be conducted during the operation of these lines. In the sections of crossing of proposed 2x400 kV line with other

lines (mainly 110 kV lines) and also related to the transposition work before DP Bystričany and DP Horná Ždaňa the demand for short term disconnection of these lines will arise for several days.

Towers of new 2x400 kV line will be installed by a specific method of stone processing called "štokovanie", conductors and earthing wires will be unwound and regulated by brakes.

The work on construction of new line require felling of grown trees located on forest soil and agricultural soil in the area of protective zone of proposed line (extending of existing PZ by routing in the corridors of dismantled lines, as well as by creation of new sections of line route). The actual extent of felling will depend on the height of wires of new line above the terrain, terrain conditions by unwinding of wires and also requirements of affected authorities, based on which it can be eliminated or minimized.

Technology of operation

New PZ of total width of 69 m will be created by the construction of new 2x400 kV line in newly proposed variants. In the route (in concurrence with the existing 2x110 kV line) the total width of current PZ will be extended by circa 57 m to one side. By the construction of new line in parallel route of existing 400 kV line, the current PZ will be extended by 45 m to one side.

In PZ of outer overhead power line and under the power line according to the Act no. 251/2012 Coll. it is prohibited:

- to establish constructions, buildings and dumps (§ 43 par. 4 a)
- to plant and grow permanent growths exceeding the height of 3 m (§ 43 par. 4 b)
- to plant and grow permanent growths exceeding the height of 3 m in the distance up to 2 m from outer conductor of aerial line with simple insulation,
- to store flammable or explosive substances (§ 43 par. 4 d)
- to conduct activities threatening safety of persons and property (§ 43 par. 4 e)
- to conduct activities threatening power line and safety and reliability of operation of transmission system (§ 43 par. 4 f).

According to § 43 par. 5 of the Act no. 251/2012 Coll. it is possible to plant and grow permanent growths exceeding the height of 3 m in the distance exceeding 5 m from the outer conductor of aerial line only if it is ensured that these growths cannot damage conductors of aerial line when falling. According to § 43, section 6 of the above stated act, the owner of land is obliged to enable the access and driveway to the operator of outer overhead power line and for that purpose to enable the operator of outer overhead power line to keep free line of lands (without forest) in the width of 4 m on both sides of outer overhead power line. This distance is defined from the contact of perpendicular, lined from outside of overhead power line to the horizontal plane of anchor of suspension point.

Slovak Electricity Transmission System, Plc. Bratislava has concluded the framework contracts with the contractors, in which the contractors are contractually bound to repair the broken down lines as soon as possible. In case of breakdown, the line will be turned off the latest in time when backup protection starts working i.e. up to 6 seconds.

III. DESCRIPTION OF PROGRESS OF ASSESSMENT

1. Environmental Impact Statement elaboration

The Environmental Impact Statement was elaborated by ENVIRO-TATRY s.r.o. Bratislava (the correctness of data was confirmed by the CEO of company and responsible elaborator RNDr. Martin Mocik) on 11/15/2012. The Environmental Impact Statement was elaborated according to the Act no. 24/2006 Coll. (hereinafter known as "the Act") and based on the extent of Scoping of Assessment of MoE of the SR no. 3326/2012-3.4/ak dated 07/02/2012. It contains zero variant (situation, which would arise if the proposed activity was not realized) and variant solution of three of five sections of route of proposed power line. In the chapter

- "C.V.1. The creation of complex of criteria and determination of their importance for the selection of optimal variant" two routes were selected:
- route 1: HV2 VP3 section 3 HR2 section 5
- route 2: HV3 VP3 section 3 HR2 section 5

Particular routes were together with zero variant compared in the chapter "C.V.2. Selection of optimal variant or determination of preference of suitability of assessed variants" and the route 1 was defined as the most suitable one. Also it is said in the Environmental Impact Statement that both routes can be considered as environmentally suitable.

In the Environmental Impact Statement, measures for prevention, elimination, minimization and compensation of environmental impacts of proposed power line and also monitoring and after-project analysis are proposed.

2. Distribution and publishing of the Environmental Impact Statement

According to § 33 par. 1 of the Act, MoE of the SR sent the Environmental Impact Statement to the following subjects:

- Ministry of Economy of the SR
- Ministry of Agriculture and Rural Development of the SR
- Ministry of Environment of the Slovak Republic, Department of State Administration
- municipality Veľké Uherce
- municipality Pažiť
- municipality Oslany
- municipality Horná Ves
- municipality Radobica
- municipality Veľké Pole
- municipality Píla
- municipality Župkov
- municipality Hrabičov
- municipality Bzenica
- municipality Dolná Ždaňa
- municipality Horná Ždaňa
- Public Health Authority of the Slovak Republic
- District Environmental Office Trenčín
- District Environmental Office Banská Bystrica
- District Environmental Office Prievidza
- District Environmental Office Banská Štiavnica
- District Office Prievidza, Department Of Civil Protection And Crisis Management
- District Office Žiar nad Hronom, Department Of Civil Protection And Crisis Management
- District Lands Office Trenčín
- District Lands Office Banská Bystrica
- District Forest Office Trenčín
- District Forest Office Banská Bystrica
- District Forest Office Prievidza
- District Forest Office Žarnovica
- District Office of Road Transport and Roads Trenčín
- District Office of Road Transport and Roads Prievidza
- District Office of Road Transport and Roads Žiar nad Hronom
- District Mining office Prievidza
- District Mining office Banská Bystrica
- Regional Monuments Board Trenčín
- Regional Monuments Board Banská Bystrica
- Regional Directorate of Fire and Police Brigades Trenčín
- Regional Directorate of Fire and Police Brigades Banská Bystrica

- Trenčín self governing region
- Banská Bystrica self governing region

According to § 33 par. 1 of the Act, MoE of the SR has published the Environmental Impact Statement of on the web site http://eia.enviroportal.sk/zoznam.

3. Public consultations of the Environmental Impact Statement

On 02/20/2013 in the House of Culture in Horná Ves the public consultations of proposed activity were held for the affected municipalities Veľké Uherce, Pažiť, Oslany, Horná Ves and Radobica. The public consultations attended 18 persons, from those 3 representatives of proponent and 2 representatives of elaborator of the Environmental Impact Statement.

The consultations were opened by RNDr. Martin Mocik, who informed the attending persons about the process of Environmental Impact Assessment of the proposed activity, about the proposed activity, about the environmental impacts of proposed activity and proposed measures for prevention, elimination, minimization and compensation of environmental impacts of proposed activity.

The attending citizens of Radobica collectively supported the HV3 variant, thus the routing of new line outside the municipality. They also wanted to know if all trees in PZ would be felled. RNDr. Mocik responded that it was not necessarily inevitable to remove all trees in PZ. The proposed measure – minimization of felling will be used in the sections of high overhangs, where the felling of stretches for wire drawing is sufficient. Also elsewhere in PZ, where the terrain conditions and tree height do no threaten safe line operation, the felling in full width of PZ is not needed.

Mayor of municipality Horná Ves, Jozef Hrotek, asked about the routing related to the currently issued valid building permits in the section behind the school. RNDr. Mocik answered that the route could be locally optimized, e.g. in territorial proceeding. This information was confirmed also by Ing. Palkovič. RNDr. Mocik also said that the municipality already had in its territorial plan the subjective line route section, so there was an assumption that the line would not be in conflict with the planned buildings. Mayor of the municipality confirmed the interest to locally specify (to move) the route in case of line routing above the area of roadhouse Háinikova žena so that it would be remote enough from it.

Mayor of municipality Radobica PhDr. Stanislav Bartoš, CSc. thanked for the preparation of new variants based on the consultations of proponent with the municipality before submitting the Environmental Impact Statement –new variants were created in this way, which are suitable for the municipality. The municipality prefers the HV3 variant, with open possibility of further optimization of routing in the area of Cerová - Banské due to recreational and landscape value of given area.

The proponent said that if it was possible to find technically and in the terrain realizable more suitable solution not conflicting with other interests (e.g. forests, nature protection), he was open to local changes the same as in case of Horná Ves.

Mayor of municipality Oslany RNDr. František Szalay also supported HV3 variant, and proved the conflict of line routing in HV2 variant with developing interests of municipality.

The record of the public consultations of proposed activity was made, which was sent together with the attendance sheet to MoE of the SR, and it is part of archived documentation from the process of assessment of proposed activity.

On 02/21/2013 in the House of Culture in Veľké Pole the public consultations of proposed activity were held. The public consultations attended 23 persons, from those 3 representatives of proponent and 1 representative of elaborator of the Environmental Impact Statement.

The consultations were opened by mayor of municipality Veľké Pole František Demeter. Then RNDr. Martin Mocik informed the attending persons about the proposed activity, about the environmental impacts of proposed activity and proposed measures for prevention, elimination, minimization and compensation of environmental impacts of proposed activity.

Mayor František Demeter stated that citizens were continuously informed about the proposed activity during the EIA process. He also stated that the line in VP1 and VP2 variants (in the corridor of dismantled 220 kV line) already had been there and a lot of people had lived right under the line. He described negative impacts, which people had been confronted with (intensity of lightning, noise from frost). He emphasised the considerable interest of municipality in the routing of new line in VP3 variant, which distantly bypasses the built-up area, local quarry and mainly Šmeckov štál and Gregerov štál and so did not affect any dwelling house, or built-up area. He informed that extraordinary meeting of municipality had been held, where they had approved the resolution on preference of the VP3 variant and that it would be sent together with the comments of citizens as the standpoint to the Environmental Impact Statement.

Mr. Maruška joined the discussion, who lived right in the affected Šmeckov štál (VP2 variant), in the house which was long-term right under the 110 kV line, and described his negative experience with that. He informed that two families still lived then in Šmeckov štál. RNDr. Mocik responded, who confirmed the responsiveness of investor for looking for the most suitable solution for the population in this project and also in similar, then realized projects.

Mayor of municipality was interested in the relations of construction to the regime of forest lands. RNDr. Mocik responded that only areas under tower feet would be permanently excluded. The use of the forest lands in PZ will be restricted for 80 years (proposed lifetime of line), for which an owner has the claim for one-off compensation.

The next question of mayor of municipality was aimed at the property question, easement registration and alike. Ing. Palkovič informed in detail about the easement given in the Act on Energetics. He assured about proper communication with land owners within the permitting process of construction, ways of information provision, communication and conventions of easement registrations into land ownership certificate, payment of one-off compensations and alike.

Citizen of municipality - Mr. Janák asked what benefit the citizens would have from the activity and also why the line was not constructed under the ground. RNDr. Mocik responded that the line under the ground would be much more expensive, technologically more difficult, with worse environmental impacts, mainly because of ground work in the whole route, with the same existence of PZ with the same restrictions. He also informed about indirect benefits for the population, following from the economic results of proponent as state organization and also about the possibilities of financial compensations for the municipality and individual owners and users of lands related to the proposed activity. He remarked that the proponent was not the end distributor of electrical energy and so did not have the possibility e.g. to influence the price of distributed electrical energy.

Again Mr. Janák expressed his worries about the impact of radiation on health. Ing. Palkovič with RNDr. Mocik declared the compliance with the valid safety and hygienic norms and legislation and closer explained the legislatively supported hygienic safety of operation and the procedure of project preparation with incorporated hygienically harmless values of electromagnetic radiation. As an example they stated the often realized possibility of rising of the position of wires above the terrain by rising of the relevant towers. Mr. Janák expressed his opinion that nothing was solved and that electromagnetic radiation is harmful. Again RNDr. Mocik informed about the compliance with the valid safety and hygienic norms and legislation. He reminded the possibility of realization of measurement of values of electromagnetic radiation (e.g. before and during operation) and the possibility of making of such requests by citizens.

The question by one of citizens about the planned height of line over the road followed. RNDr. Mocik responded about the parameters stated by the norms and about their unambiguous complying in projecting and locating of towers. Ing. Palkovič added information about construction process and construction documentation.

The question about possible conflict of line with birdlife was asked. RNDr. Mocik informed about the existing research of ornithofauna in the affected area, based on which the sections for placement of objects making DS visible were selected to minimize the risk of collisions.

He also emphasized incorporation of nesting boxes and pads on selected towers. He explained the possibilities of minimization of tree felling in PZ of line, time limits given by vegetation-nesting period.

The question by citizen of municipality - Mr. Pavlov followed, whether this line would have impact on TV and mobile signal. Ing. Palkovič informed about existing experiences without negative impacts and possibilities of measurement of level and quality of signal before and after the construction.

Another opinion by Mr. Maruška was aimed at the problem of areas of green vegetation and their possible reduction due to felling in PZ considering the routing of new line in original – dismantled corridors. Mayor of municipality opposed that the interests of citizens were priority – their health and comfort of living and therefore the municipality preferred VP3 variant. RNDr. Mocik added that in case of routing of new 400 kV line in the original corridors after the dismantled lines would lead to extending felling of these corridors.

At the end of discussion mayor of municipality thanked and requested for the standpoint of citizens to the Environmental Impact Statement, mainly in relation to the submitted variants. He also confirmed the requirement for measurement of values of electromagnetic radiation before and after the construction.

The record of the public consultations of proposed activity was made, which was sent together with the attendance sheet to MoE of the SR, and it is part of archived documentation from the process of assessment of proposed activity.

On 02/21/2013 in the House of Culture in Hrabičov the public consultations of proposed activity were held for the affected municipalities Píla, Župkov, Hrabičov, Bzenica, Dolná Ždaňa and Horná Ždaňa. The public consultations attended 18 persons, from those 3 representatives of proponent and 2 representatives of elaborator of the Environmental Impact Statement.

The consultations were opened by mayor of municipality Hrabičov Ján Adámik. Then RNDr. Martin Mocik informed the attending persons about the process of Environmental Impact Assessment of proposed activity, about the proposed activity, about the environmental impacts of proposed activity and proposed measures for prevention, elimination, minimization and compensation of environmental impacts of proposed activity.

The representative of Bukovina landowners Mr. Milan Ďurkov was interested in that who would conduct the felling, when, who and how the compensation would work. RNDr. Mocik reacted, who closely described the problem of conduction of construction work on forest lands related to the line construction – accesses, felling, processing of wood mass, informed about the financial compensations for the felling of forest and non-forest trees and the right of deforestation by owner, or user of forest. Ing. Palkovič added details about the performance of engineering activity by approving process of construction. He assured about proper communications with land owners, ways of information provision, communication about conventions of payment of one-off compensations for restricted use and also compensation for deforestation.

Mayor of municipality Župkov Ing. Ján Tomáš was interested in the amount of extension of PZ. RNDr. Mocik said that in case of concurrence of new 400 kV line with 400 kV line, it was circa by 45 m, in case of concurrence with 2x110 kV line, it was circa by 55 m on one side from the border of original PZ.

Citizen of municipality Hrabičov Ing. Robert Búci repeated and described in more detail to other attending citizens of municipality the routing of HR2 variant as well as the original HR1 variant from the Preliminary Environmental Study leading through the cadastral area of Hrabičov. He expressed the opinion that HR2 variant was for them as for the citizens definitely more acceptable. According to him HR1 variant would bring a lot of negatives during the construction and also during operation with respect to the routing in contact with the built-up area of municipality. He asked attending citizens of Hrabičov which variant they would prefer. They definitely declared the unacceptability of HR1 variant. That was consequently supported by mayor of municipality Ján Adámik, saying that the original HR1

variant from the Preliminary Environmental Study was in conflict with development plans of municipality in the affected area and municipality definitely supported HR2 variant.

Citizens of Hrabičov expressed their interest to be informed also in the further process of preparation of construction. RNDr. Mocik confirmed that also after finishing the process of EIA within the territorial and building proceeding the affected municipalities would be the regular participant in proceedings. Within the further preparation of construction e.g. projects of deforestation, access roads would be introduced, in which the particular municipalities could participate. He reminded that one of affected municipalities would be the building office.

Next question followed by citizens of Hrabičov about the successiveness of process of preparation of construction after EIA, mainly how the realization of measures proposed in this process would be verifiable and how the measures for mitigation of impacts on population – disturbance of comfort would be. Ing. Palkovič responded, who informed about the selection of project organization, engineering organization and construction contractor. Each of these organizations would be responsible for the incorporation and fulfilment of measures proposed in the EIA process. He repeated that the part of the project for building permit, the project of access to building site (access roads) would be elaborated, which would have to be followed by the construction contractor. He also repeated the right of municipality for the restoration of all roads to the original or better condition than before the construction. He also said that for the construction phase, environmental supervision of construction was proposed besides the construction supervision, the aim of which would be the check and regulation of constructor in the terrain.

Then the citizens asked the question whether the route was definite or it can be locally changed. Ing. Palkovič confirmed that certainly there was such possibility, also with respect to that the tower sites were not defined yet. Within the territorial proceeding there was the space for local changes of routing (movements, diversions) due to particular terrain conditions or due to optimization of tower site based on positioning of borders of particular lands.

Mayor of municipality Župkov Ing. Ján Tomáš remarked that their objection from the Preliminary Environmental Study had been accepted and incorporated and he endorsed the opinion that HR2 variant is more acceptable for citizens and also expressed the persuasion that all affected citizens would be the participants in the territorial and building proceeding. He also expressed the opinion that citizens themselves had to be actively interested in the process of construction preparation. He started the discussion about the following constructional process and possible control mechanisms of municipality.

Mayor of municipality Hrabičov Ján Adámik asked if the municipality could be incorporated into the selected realization work of construction. Ing. Palkovič confirmed that after the agreement with the construction contractor, the municipality could realize some of possible work, too. Such cooperation is realized mainly in the conduction of deforestation, felling, wood mass transport and alike. Mayor pointed out the importance of future cooperation of municipality, citizens and construction contractor. RNDr. Mocik confirmed that engineering activity during permitting process of construction according to the building Act would be conducted, the part of which was the obligation to inform directly affected citizens.

The record of the public consultations of proposed activity was made, which was sent together with the attendance sheet to MoE of the SR, and it is part of archived documentation from the process of assessment of proposed activity.

4. Standpoints, comments and expert reviews submitted to the Environmental Impact Statement

According to the § 35 of the Act, the below stated written standpoints to the Environmental Impact Statement were delivered to MoE of the SR:

Ministry of Economy of the Slovak Republic (letter no. 425/2013-4100-MH date 02/01/2013)

has no objections to the Environmental Impact Statement. They consider positive impacts of proposed activity as prevailing over the negative ones. They assume the smallest negative environmental impacts in case of realization of route 1 and route 2.

Ministry of Agriculture and Rural Development of the Slovak Republic (letter no. 1314/2013-720 date 02/02/2013)

remarks that while in case of part of line route marked as "HV", the forest land principles following from § 5 of the Act no. 326/2005 Coll. on Forests as amended were adhered, by proposal of optimal route in the "HV2" variant, on the contrary the line route in the locality marked as "HR2" violates the subjective principles of forest land protection by the proposal of route through the forest lands.

Within the assessment and determination of rate of "weights" they consider as irrelevant the reduction of "assessment weight" for occupations of forest lands protected by law and as unjustified the increase of "weights" for respecting the municipalities' requirements. They consider impact of electromagnetic radiation as a limiting element for the impact on population, which (according to the text stated in the Environmental Impact Statement) can be regulated by the type and height of power towers.

In further process they require to respect basic principles of forest land protection given by § 5 of quoted Act on Forests and in further process, possibly yet before the issue of Final Record within the impact assessment process, to realize the separate consultation with the proponent of the Preliminary Environmental Study, elaborator of the Preliminary Environmental Study, municipality representatives, forest managers and with attendance of respective authority of forest management state administration (District Forest Office in Žarnovica) to repeatedly assess the proposed variants "HR1" and "HR2" and to give reasons for the social necessity of placement of proposed activity on forest lands. The substantiation of social necessity follows from § 5 par. 1 of quoted Act on Forests.

Conditions stated in the standpoint of Ministry of Agriculture and Rural Development of the Slovak Republic no. 2123/2012-720 date 06/12/2012 to the "Preliminary Environmental Study" for given activity remain in force and they require to incorporate them into the conditions of Final Record. The conditions are the following:

- To elaborate and assess also other, alternative solution of route of proposed power line, mainly so that it would bypass the forest complex near municipality Radobica, to revaluate or to give reasons for the route of line location in the surroundings of municipality Veľké Pole and to give reasons for the route location in the part of the connecting of sections 2.3 and 2.4.
- Since according to § 6 par. 3 and § 7 par. 3 of the Act no. 326/2005 Coll. on Forests as amended (hereinafter known as "the Act on Forests"), for the issue of zoning decision on location of construction on the forest land and for exclusion of forest lands from fulfilment of forest functions and their restriction, the agreement of an owner of forest land or the administrator of forest land is needed, to give reasons for and to agree on the routing with respect to the previous condition in cooperation with the owners of affected forest lands and with affected forest managers. By this solution, i.e. the separate consultation with owners of forest lands and forest managers, the possibility of direct assessment of impact on affected area of proposed activity will be ensured, e.g. for selection of another route and also activities which are not mentioned in the Preliminary Environmental Study, e.g. adjustment of forest and field roads for the needs of actual construction of power line, the restrictions following from future existence of power line to the development of affected region will be assessed, e.g. mining in local quarry, plans for building of fire protection dams and development of tourism, the areas of compulsory non-forest area of the width of 4 metres according to § 36 par. 6 of the Act no. 656/2004 Coll. on Energetics as amended and alike will be specified.
- For the whole route of power line, the decision of forest management state administration
 will have to be issued on temporary exclusion of forest lands from the fulfilment of forest
 functions for all affected forest lands and 69 metre width of PZ and possibly other
 temporarily occupied areas. From the aspect of ensurement of sustainability and
 longevity of forest growths in affected area, the most important impacts of proposed

activity on forests (and on fauna) are not those which the elaborator states enumeratively in the text (of the Preliminary Environmental Study), but those that are stated in its conclusion, i.e. newly created edges, weakening of stability of forest growths by newly created edges and distinctive (unprotected by growth cover) impact of climatic factors on forest.

- Some measures (in the Preliminary Environmental Study) are opposing, or mutually unrealizable, mainly from the aspect of their possible realization during the year, e.g. measure no. 4 and no. 26 and no. 29. (e.g. restriction of realization of logging (felling) for winter months and on the other side the restriction of work realization for the non-raining season).
- The forest trees are planted on forest lands in compliance with the Act on Forests and the Act no. 138/2010 Coll. on Forest Reproductive Material as amended, it is not possible to require the forestation of these lands according to the requirements of authorities of nature and landscape protection. The stated is related mainly to the measure no. 14 and no. 39 (in the Preliminary Environmental Study). (Note: the reclamation does not have to be realized only by forestation but also by natural renewal of forest trees from surrounding forest lands and alike)
- To rephrase the measure no. 42 (in the Preliminary Environmental Study) so that this forestation of PZ will be conducted according to the Act no. 326/2005 Coll. on Forests as amended, the Act no. 138/2010 Coll. on Forest Reproductive Material as amended and requirements of owners of forest lands.
- The measure no. 45 (in the Preliminary Environmental Study) affects only the agricultural soil, for the permanent occupation (exclusion) of forest soil the levy shall be paid (see measure no. 48).
- To rephrase the measure no. 46 (in the Preliminary Environmental Study) as "Compensation for the restriction of proprietary rights according to § 35 of the Act no. 326/2005 Coll. on Forests as amended".
- To rephrase the measure no. 48 (in the Preliminary Environmental Study) as "The Compensation (levy) for the permanent and temporary loss of non-productive functions of forest".

Ministry of Environment of the Slovak Republic, Department of State Administration (letter no. 3743/2013-2.2, 9987/2013 date 02/15/2013)

recommends to realize the route 1 of proposed power line, which they consider as more convenient than the route 2 with minimal difference. With respect to that the whole route of proposed activity is important gene pool area for birds and in several parts it crosses the migration routes of birds, they require placing the quality objects making DS visible on proposed power line. The stated standpoint was issued based also on the standpoint of State Nature Conservancy (ŠOP) of the SR no. 3743/2013-2.2 date 01/23/2013.

municipality Oslany (letter no. 59/2013 date 02/21/2013)

states that only HV2 variant of section 1of proposed power line affects its area. This variant is not in conflict with the built-up area of municipality, but it would negatively impact its development plans. In the Buclovné locality right before the crossing of Osliansky brook it leads over motocross area, where the area of polyfunctional building is located, designated also for housing. By transit from road II/512 to Sítenie locality it leads through the area defined in the valid territorial plan of municipality as the industrial park. For this reason this variant is unacceptable for the municipality. Municipality Oslany recommends HV3 variant after the agreement with the participating municipalities. They do not expect negative impact of this variant on the environment or on life quality and health of population.

municipality Radobica (letter no. 011/2013 date 02/04/2013)

definitely rejects HV1 variant of the section 1. They consider the remaining two variants of this section as more suitable, despite that they consider them as unsuitable in the part Radobica – Cerová and Banské from the aspect of municipality. They state that Cerová and Banské were very sought-after tourist and recreational part of municipality and the construction and operation of proposed power line would significantly reduce the value of this cottage area. They think that the authors of the Environmental Impact Statement

overestimate the negative impacts on nature and underestimate possible impacts on life quality and health of population. They require diverting the routes HV2 and HV3 more distant from dwellings so that it would bypass the built-up area and the specific character of scattered area would be preserved. They recommend to place the route of power line in the forest growths and to cover them from the view of inhabited objects.

municipality Veľké Pole (letter no. 45/2013 date 02/27/2013)

agrees with VP3 variant of proposed power line. The annex of the standpoint are Written Record no. 1/2013 of extraordinary meeting of Municipal council in Veľké Pole on 02/19/2013, Written Record of public consultations of the Environmental Impact Statement "Power line 2x400 kV Bystričany locality – Horná Ždaňa" held on 02/21/2013 and the standpoint of citizens of municipality Veľké Pole signed by Ing. Štefan Bartoš.

Written Record no. 1/2013 of extraordinary meeting of Municipal council in Veľké Pole on 02/19/2013 contains the resolution no. 2/2013, according to which Municipal council in Veľké Pole approves VP3 variant.

In the standpoint of citizens of municipality Veľké Pole it is stated that they strongly disapprove variants VP1 and VP2 and consider them as unfortunate. They support VP3 variant, and they state the following reasons:

- the route is outside the built-up area of municipality, graveyard and local quarry
- in the PZ there are no dwelling houses (it bypasses Šmeckov and Grégerov štál)
- environmental and population health protection
- the felling of lowest number of trees
- reduction of impact of electromagnetic radiation and other undesired impacts
- reduction of possible damages, since the line attracts lightning
- preservation of natural beauty of municipality (recreational potential)
- minimization of worsening of quality of received signal (TV, radio, mobile)
- the shortest length of line
- the lowest costs of construction

municipality Hrabičov (letter no. 8/2013 date 03/01/2013)

supports HR2 variant. They state that HR1 variant is in conflict with development plans of municipality and it would bring a lot of negatives during the construction and operation of proposed power line.

municipality Píla (letter no. 44/2013 date 03/06/2013)

agrees with the VP3 variant.

municipality Bzenica

does not have any objections to the proposed activity.

Public Health Authority of the Slovak Republic (letter no. OHŽP-1556/2013 date 02/07/2013)

agrees with the Environmental Impact Statement. In the substantiation of the standpoint they state that it is necessary to submit the expert study for the proposed activity within the project documentation for territorial proceeding, which assesses the presupposed level of electric and magnetic fields in relation to the fulfilment of requirements of the regulation of Ministry of Health of the SR no. 534/2007 Coll. on the Details of Requirements for Sources of Electromagnetic Radiation and for Limits of Exposition of Population Radiation in the Environment.

District Environmental Office Trenčín (letter no. OÚŽP 2013/348/1352 Jk date 02/20/2013)

states that the documentation respects the interests of natural protection and all particularly protected parts of nature and landscape are registered and documented in it. They prefer HV2 variant provided that the placement of towers in riparian growth of brook Cerová will be conducted based on the realization project considering the most preserved parts of priority biotope of European importance 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior. They consider as necessary to follow all technical measures during the construction (mainly in points 31 – 67) stated in the Environmental Impact Statement.

District Environmental Office Banská Bystrica (letter no. 03/2013/456-Pr date 02/12/2013)

points out the confusion of areas of European importance SKUEV0013 Stráž and SKUEV1013 Stráž on p. 250 in the Environmental Impact Statement. SKUEV0013 Stráž is located in the cadastral area Veľké Pole on the area of 19.882 ha, SKUEV1013 Stráž is the part of consulted supplement of national list of areas of European importance and it is in the cadastral area Veľké Pole on the area of 329.04 ha. The route of power line reaches in the cadastral area Veľké Pole the edge of SKUEV0013 Stráž by short sections of variants VP1, VP2 (60 m) and VP3 (860 m) and the SKUEV1013 Stráž by variants VP1 (1 550 m), VP2 (1 800 m) and VP3 (860 m).

They agree with the selection of route and with the proposed measures. They require consulting preliminarily the exact location of towers of proposed power line in the area of European importance SKUEV0013 and SKUEV1013 with the Administration of CHKO Ponitrie due to elimination or minimization of liquidation of protected and endangered species by building of concrete foundations of towers latest to the date of zoning decision issue.

District Environmental Office Prievidza (letter no. OÚŽP/2013/00169-18 date 02/05/2013)

submits the standpoints of particular sections and the particular sections of its branch office in Partizánske in the letter.

The section of nature and landscape protection requires the consistent fulfilment of measures proposed for prevention, elimination, minimization and compensation of impacts of proposed activity stated in the Environmental Impact Statement to protect agricultural soil, forest soil, landscape and protected areas, fauna, vegetation and biotopes.

The section of waste management has no objections to the Environmental Impact Statement. The state section of water management states that the route of HV1 variant runs through the PZ of II. degree of waterworks sources HGB-1 HHV-1 in the cadastral area Horná Ves and they require the fulfilment of measure for the protection of waterworks sources according to the decisions on their designation and provisions of regulation of MoE of the SR no. 29/2005 Coll.

The state section of air protection has no objections to the Environmental Impact Statement. The state section of air protection of the branch office Partizánske considers as necessary, with respect to the manipulation with dusty materials, that the assessment of extent of measures is based on meteorological conditions and the surroundings conditions.

The state section of water management of the branch office Partizánske has no objections to the Environmental Impact Statement.

The section of waste management of the branch office Partizánske has no objections to the Environmental Impact Statement.

The section of nature and landscape protection of the branch office Partizánske requires fulfilment of mainly these measures, which are considered also in the Environmental Impact Statement:

- to minimize the tree felling,
- to maximal extent preserve the linear non-forest tree vegetation,
- to realize the felling out of vegetation period (October February),
- in the selected sections in cooperation with ŠOP of the SR to realize the measures for making the line wires visible (terminal conductor of power line 400 kV),
- to realize the construction so that in forest sections the important bird species were not spatially or timely restricted,
- for the prevention of unsuitable establishing of nests on line towers in cooperation with ŠOP of the SR to install artificial nesting boxes on suitable towers,
- before dismantling of 220 kV line to realize the survey of appearance of nesting raptors,
- in the terrain depressions and excavation holes before their backfilling and reclamation, to conduct the survey with possible transfer of animals (mainly amphibians) to suitable places.

- in the affected protected areas (CHKO Ponitrie) to consider the local particularities of sites for placement of towers,
- to consult with ŠOP of the SR the possible construction of access roads, extent of work and placement of towers in the affected protected areas (CHKO Ponitrie),
- to consider technical possibilities of realization of overhead power lines in protected areas.

Further they require before the issue of zoning decision (within the scope of district Partizánske)

- to select sections in the route and to incorporate them into the project documentation, where the objects making DS visible will be installed on wires,
- to make an inventory of trees growing outside the forest, to calculate their social value and to incorporate the data into the project documentation.

District Environmental Office Banská Štiavnica (letter no. B/2013/00156/ZC-DK date 02/14/2013)

as the competent authority of state water management agrees with the realization of the Preliminary Environmental Study under the following conditions:

- In the realization of activity to proceed according to the provisions of the Act no. 364/2004 Coll. (Act on Water) as amended and to pay attention to that the water management interests are not violated.
- By possible manipulation with dangerous substances during the realization of liquidation
 of loading ramp the applicant is obliged to follow the provisions of § 39 of the Act no.
 364/2004 Coll. (Act on Water) as amended and to do necessary measures to prevent the
 getting of these substances into surface and ground waters and so threaten their quality.

District Environmental Office Banská Štiavnica (letter no. B/2013/00155/ZC-HF date 02/21/2013)

as the competent authority of state waste management agrees without objections.

District Environmental Office Banská Štiavnica (letter no. B/2013/00157/ZC-TR date 02/20/2013)

as the competent authority of state administration of nature and landscape protection they point out the confusion of areas of European importance SKUEV0013 Stráž and SKUEV1013 Stráž on p. 250 in the Environmental Impact Statement. They consider as necessary to consult preliminarily the exact location of towers of proposed power line in the area of European importance SKUEV0013 and SKUEV1013 with the Administration of CHKO Ponitrie due to elimination or minimization of liquidation of protected and endangered species by building of concrete foundations of towers latest to the date of zoning decision issue.

They consider the proposed line route from the aspect of interest of nature protection as acceptable, they consider HR1 variant as more appropriate than HR2 variant. They recommend VP3 variant in the section 2. They incline to the HR1 variant in the section 4.

They consider as necessary to adopt all measures for mitigation of environmental impacts stated in the Environmental Impact Statement to further phases of documentation for territorial and building proceeding paying attention mainly to:

- to realize the objects making wires of line visible noticeable during night, mist and worsened visibility (mainly in the sections Pažiť – Horná Ves and Bukovina – Horná Ždaňa),
- to install boxes for raptors on selected towers,
- to minimize the tree felling,
- to preserve the linear non-forest tree vegetation to maximal extent,
- to realize the felling out of vegetation period (October February, March),
- in the selected sections in cooperation with ŠOP of the SR to realize the measures for making the line wires visible (terminal conductor of power line 400 kV),
- to realize the construction so that in forest sections the important bird species were not spatially or timely restricted,

- for the prevention of unsuitable establishing of nests on line towers in cooperation with ŠOP of the SR to install artificial nesting boxes on suitable towers,
- in the terrain depressions and excavation holes before their backfilling and reclamation to conduct research with possible transfer of animals (mainly amphibians) to suitable places,
- in the affected protected areas (CHKO Ponitrie) to consider the local particularities of sites for placement of towers,
- in cadastral area Veľké Pole in the route of proposed power line where the biotope of European importance Lowland hay meadows (6510) is located with the occurrence of protected and endangered species to consult preliminarily the exact location of towers of proposed power line with the Administration of CHKO Ponitrie due to elimination or minimization of liquidation of protected and endangered species by building of concrete foundations,
- to consult with ŠOP of the SR the possible construction of access roads, extent of work and placement of towers in affected protected areas of CHKO Ponitrie.

District Environmental Office Banská Štiavnica (letter no. C/2013/00180/ZH-REK date 02/13/2013)

as the competent authority of the state section of water management agrees with the Environmental Impact Statement under the following conditions:

- To respect bank lands of watercourses in the given locality.
- For the construction project for the zoning decision, the standpoint of authority of state water management according to § 28 of the Act no. 364/2004 Coll. (Act on Water) is necessary.

District Environmental Office Banská Štiavnica (letter no. C/2013/00181-002/ZH date 02/06/2013)

as the authority of the state section of waste management agrees with the Environmental Impact Statement.

District Environmental Office Banská Štiavnica (letter no. C/2013/00179/ZH date 02/04/2013)

as the authority of the state administration of air protection has no objections.

District Environmental Office Banská Štiavnica (letter no. C/2013/00178-03/ZH-NOH date 02/06/2013)

as the authority of nature and landscape protection has no objections to the optimal selection of route with the proposed measures.

District Office Prievidza (letter no. ObU-PD-CO-2013/00845-2/003693 date 02/08/2013) has no objections to the Environmental Impact Statement.

District Office Žiar nad Hronom (letter no. ObU-ZH-CO-2013/00453-2 date 01/28/2013) has no objections to the Environmental Impact Statement from the aspect of civil protection of population.

District Lands Office Banská Bystrica (letter no. 2013/00045 date 02/14/2013)

requires respecting consistently the measures proposed for prevention, elimination, minimization and compensation of environmental impacts of proposed activity, mainly in relation to possible erosion, compaction and contamination of affected agricultural soil.

District Forest Office Trenčín (letter no. 2013/00072 date 02/20/2013)

agrees with the realization of submitted Preliminary Environmental Study - HV2 variant on forest lands.

District Forest Office Banská Bystrica (letter no. 2013/00121 date 02/21/2013)

states that the proponent further suggests the use of route of dismantled power line and ignores the fact that by dismantling of line the linear construction as such was liquidated and by that the restriction of use of affected forest lands was liquidated. So the authorities of the state administration of forest management can not respect the data stated in the table 52 (p. 256 in the Environmental Impact Statement), which do not respect the current condition and therefore they are misleading. With respect to that they do not agree with the selection and the reasoning of proposal of optimal variant. With respect to the forest land protection they

consider as optimal routing in the area of Banská Bystrica region in the variant of VP1-1Z-HR1-1V.

District Forest Office Prievidza (letter no. OLÚ 2013/35-220 date 02/20/2013)

requires in compliance with § 36 of the Act to assess the impact of proposed activity according to variants HV1, HV2 and HV3 from the aspect of

- the amount of loss of non-productive functions of forests (of value of effects of non-productive functions of forests according to the management complexes of forest types), temporary excluding the forest lands from the fulfilment of forest functions,
- the amount of compensation for the restriction of proprietary rights (§ 35 par. 4 letter a) of the Act on Forests), which belongs to the owners of forest lands according to § 35 par. 1 of the Act on Forests.

They state that their requirements within the Scoping of Assessment were incorporated into the Environmental Impact Statement and have no objections to this Environmental Impact Statement.

District Forest Office Zarnovica (letter no. 2013/00061 date 02/08/2013)

Within their territorial scope they propose the route VP3-1z-HR1-1v. By the realization of this route the smallest area of forest lands will be used and the smallest disturbance of interests of forest management will occur.

District Office of Road Transport and Roads Trenčín (letter no. AA/2013/00297-002/MAR date 02/08/2013)

agrees with the Environmental Impact Statement under the following conditions:

- The constructor will ensure that during realization no damage or pollution of road land of the road I/64 will occur.
- The standpoint to the contact with the road II/512 and III/5121 for MoE of the SR will be issued by District Office of Road Transport and Roads Prievidza.

District Office of Road Transport and Roads Prievidza (letter no. AA/2013/515-002/JUR date 02/06/2013)

agrees with the Environmental Impact Statement without conditions.

District Mining Office Prievidza (letter no. 219-360/2013 date 02/06/2013)

has no objections to the Environmental Impact Statement.

District Mining Office Banská Bystrica (letter no. 285-420/2013 date 01/28/2013)

has no objections to the Environmental Impact Statement. They recommend realization of the VP3 route in the stated locality because of the mining activity conducted in the quarry Veľké Pole and related bursting work.

Regional Monuments Board Trenčín (letter no. KPU TN-2013/202-2/609/DVO date 02/01/2013)

confirms the validity of condition of mandatory standpoint no. TN-2012/00727-02/Dvo date 05/21/2012, which is that the proponent shall obtain the statement of Regional Monuments Board Trenčín branch office Prievidza from the aspect of archaeological discoveries in advance before the issue of building permit (decision about the necessity to realize the archaeological research in the area of construction).

Regional Monuments Board Banská Bystrica (letter no. BB-13/562-2/1562/RUS date 02/25/2013)

has no objections to the Environmental Impact Statement.

Regional Directorate of Fire and Police Brigades Trenčín (letter no. KRHZ-TN-OPP-18-004/2013 date 01/28/2013)

does not expect the creation of negative environmental impacts.

Regional Directorate of Fire and Police Brigades Banská Bystrica (letter no. KRHZ-BB-OPP-138/2013 date 01/28/2013)

has no objections to the Environmental Impact Statement.

Trenčín self governing region (letter no. TSK/2013/01355-3 date 02/19/2013)

states that HV1 variant is in compliance with the Amendments and addendum no.2 of ÚPN (Territorial Planning) of VÚC Trenčín self governing region. In case of another variant it is necessary to incorporate this (different) variant into the respective territorial planning documentations.

Banská Bystrica self governing region (letter no. 4989/2013/ODDUPZP-002, 5308/2013 date 02/06/2013)

considers as necessary to ensure the minimization of interventions in the area with typical forms and structures of scattered settlement ("štále") during construction, because its protection is solved in the regulations 5.12 and 5.13 in the sphere of area organization from the aspect of cultural heritage in the mandatory part of Territorial Plan of VÚC Banská Bystrica self governing region. They consider the VP3 variant as the most suitable in the section 2 and the HR2 variant in the section 4. Possible incongruity of the route with the graphic part of Territorial Plan of VÚC Banská Bystrica self governing region for new variants will be changed in the next update of this territorial plan. It is necessary to apply for the standpoint of Banská Bystrica self governing region, Department of Road Infrastructure when affecting the II. and III. class roads.

5. Elaboration of expert review according to § 36 of the Act

Expert review according to § 36 of the Act was elaborated by Ing. Ol'ga Szabóová, registered in the list of professionally qualified persons for the environmental impact assessment under the number 335/2002-OPV.

The elaborator states in the expert review that the submitted Environmental Impact Statement is processed at high professional level and fulfils all requirements following from the Act and the Scoping of Assessment of MoE of the SR no. 3326/2012-3.4/ak date 07/02/2012. Despite some drawbacks it is the sufficient source material for the assessment process, enables to state expert conclusions for the environmental impacts of particular variants of proposed power line, to state their preference, to propose the adequate measures for the prevention, elimination and compensation of environmental impacts of proposed activity and also to propose necessary monitoring and the after-project analysis of environmental impacts of proposed activity.

The expert review elaborator associates with the recommendations of variants of solution of proposed activity stated in the Environmental Impact Statement in all sections of proposed power line, except for the section 4, where she recommends the HR1 variant.

IV. COMPLEX ASSESSMENT OF ENVIRONMENTAL IMPACTS OF PROPOSED ACTIVITY INCLUDING HEALTH

Impacts on population

The total number of citizens temporarily affected by the construction is up to 10 000. With respect to the scattered character of settlement in the larger area of municipalities not all citizens will be affected to the same extent, but besides the citizens of affected municipalities, the recreants might be affected by the construction, which have their recreational objects in the surroundings of line route or access communications. No impact of proposed power line on current demographic development of population is expected.

The realization of proposed activity will have positive impact from the aspect of unemployment, because it will provide work possibilities for several tens of people, mainly in workman professions. The workers will find the job in preparation phases as well as in auxiliary terrain, dismantling, building and assembling work. This impact will be temporary, since it will have effect only during several years of construction of proposed power line.

The positive impact is also the partial economic contribution for the population of affected urban units, which will follow from land purchase, or financial compensation of creation of easement for owners of directly affected lands, financial compensations for temporarily used areas of agricultural and forest soil during the construction and financial compensations for restriction of use of lands in the protective zone during the operation of new 2x400 kV line. The positive impact of realization of proposed activity is the further strengthening of possibilities of power distribution with indirect positive development and economic consequences.

During the construction the impacts on population related to the construction work that would affect their health condition are not expected. The construction work will take place in free

landscape outside the built-up areas of urban units, which will be so affected only by transport related to the construction, which will produce increased noise, dustiness and emissions. These impacts will be temporary and irregular and will cause only decrease in comfort and quality of life of affected population.

In relation to the operation of proposed power line, with respect to its character and mainly to positioning of line route predominantly outside the built-up and permanently inhibited areas, no impacts on health condition of population are expected.

During the operation the proposed power line might visually incommode the population, but the biggest importance is attached to the possible effect of electric and magnetic fields. According to general knowledge, in case of similar power lines their intensity is low and negligible outside the PZ. According to the Act no. 355/2007 Coll. on Protection, Support and Development of Public Health and on Amendments and Supplements to Certain Acts "the sources of electromagnetic radiation in the planning and realization of construction shall be ensured so that the limit values of the exposure of the general population are not exceeded". The respective limit values are designated in the regulation of Ministry of Health of the SR no. 534/2007 Coll. on the Details of Requirements for Sources of Electromagnetic Radiation and for Limits of Exposition of Population Radiation in the Environment. For the verification of fulfilment of limit values it is recommended to ensure the elaboration of expert review assessing the presupposed level of electric and magnetic fields. The results of expert review are recommended to be used for local optimization of the route of proposed power line and the height of towers in the surroundings of human dwellings within the project preparation for the territorial proceeding.

Great part of affected area is characteristic of scattered settlements – "štále", which are nowadays often used also for recreation and relax. Besides the permanent citizens, also the visitors using the affected area for relax might be affected by the negative impacts of construction but also by possible change of scenery during the operation.

Impacts on rock environment

Impacts on rock environment are related mainly to the phase of construction. They represent the risk of initiation of erosion processes related to the excavation work by building of tower foundations, forest growth felling and wood manipulation, linear non-forest vegetation felling (bank forests, ravines, windbreaks, shrubs along erosion furrows), adjustments of access communications and movement of construction machines in the PZ of proposed power line. These impacts will be demonstrated in relation to the morphology of terrain in the places of tower building or access roads and in relation to the areas with the occurrence of geodynamic phenomena. The impact on the stability of rock environment will be demonstrated mainly in the areas with the occurrence of potential and stabilized landslides, or the areas which are assessed as predisposed to these phenomena under certain conditions. In unstable and potentially unstable areas, the negative impacts, i.e. the initiation and development of landslides and erosion, might be caused by construction interventions. Due to the presupposition of negative construction impacts in such areas it is suitable to move the route outside the landslide areas, or to place the towers in the stabile areas.

With respect to the character of activity related to the construction of power line and the character of geological structure of the affected area, the impacts which would seriously affect the quality and condition of the environment will not occur. Impacts on rock environment will be restricted only to the places of construction of new towers and building of access roads to towers. These impacts are related mainly to the phase of construction, possibly short time period after its finish. The operation of power line will not have negative impact on rock environment. The pollution of rock environment might occur in case of leakage of oil substances from construction machines and transport. Such impact means only the risk.

The part of assessed area is predisposed to the creation of hill deformation and the area can be initiated by unsuitable constructional intervention or by applying the landslide-forming factor e.g. as a result of extreme precipitations.

The vulnerability of rock environment to pothole erosion and side erosion is demonstrated on

hills composed of bigger massiveness of mainly cohesive and incohesive soils, in bedrocks of which there are mainly semi-rocky rocks.

The most stabile part of proposed route is the western part section of section 1. The area is characteristic of flat and plain relief. From the aspect of stability it is appropriate for the construction and routing of construction. The stabile sections are set apart also in other sections. In these areas impacts on rock environment, geodynamic phenomena and geomorphologic conditions are not expected. Engineering-geological research shall precede the construction.

Areas conditionally suitable for the construction of new power line are locally spread in the whole route of proposed power line. By the change of engineering-geological and hydrogeological conditions and inappropriate constructional intervention the area becomes susceptible to the creation of hill deformations and erosion activity. The construction in such environment means potentially negative impact on rock environment and geodynamic phenomena and requires detailed assessment of bedrock and stability conditions.

Areas unsuitable for the construction of new power line are the areas with the development of hill deformations, erosion and areas with the predisposition of occurrence of tectonic lines, along which the degeneration of geotechnical features of rock massif occurs. In these areas there is a high presupposition of negative impacts on rock environment, geodynamic phenomena and geomorphologic conditions during the construction. The placement of route in unstable areas shall be reconsidered or the route shall be moved into the stabile area. The establishment of towers in areas with presupposed negative impact on given geological elements will require the detailed geologic research.

Spatial organization of suitable, conditionally suitable and unsuitable areas for the construction of proposed power line is graphically depicted in the Map of suitability of area for the construction of line from the aspect of engineering-geologic zoning (Annex no. 4 of the Environmental Impact Statement; explanatory notes are on p. 189 in the Environmental Impact Statement).

Erosion phenomena are expected mainly on the places with steep hills (from Radobica to Bukovina) with the water activity. After the removal of vegetation and soil cover, this part of the section will be predisposed mainly to pothole erosion, intensive weathering of uncovered rocks, falling of fragments and landslide movements. In some cases by the impact of inappropriate actions (e.g. felling of hills by ground work) hill movement might be caused erosions of local character. From the aspect of impact on rock environment the building of access communications to towers of proposed line and the movement of machines inside the corridor of line in steep sections is considered as the most important risk. Deforestation, uncovering of rock environment, change of morphology of terrain, crossing of heavy machines might cause the potential movement of released rocks by gravitation powers and water erosion, possible creation of conditions for the development of erosion phenomena.

In the course of proposed route of VP1 variant and by the eastern edge of VP2 variant, southwards from municipality Veľké Pole two deposits of non-reserved raw mineral – building stone are located. It is the deposit Veľké Pole (ID 40836) and the deposit Veľké Pole-Zaller with developed mining (ID 4517). So the line route in VP1 variant is in conflict with the deposit Veľké Pole-Zaller with developed mining. In the affected area in the cadastral area Dolná Ždaňa there is also the deposit of building stone Dolná Ždaňa – Rakovec, and the deposit with stopped mining Horná Ždaňa – Koložiar, which is however outside the route of proposed power line.

In the interest area also two research areas (RA) were determined. RA (P28/10) named Žiar basin for the thermal ground waters and RA (P17/10) named Bukovina for AU, AG and precious soils. The determined research areas are located in the route of proposed line between municipalities Bukovina and Horná Ždaňa. The proposed power line will not affect the mining or condition of stated research areas in any way. The foundation holes of tower sites reach the depth of max. 5 m, and the depth extension of stated horizons is much deeper.

The impacts on rock environment and relief during the construction can be assessed overall as slightly significant, temporary, short term. The operation of proposed power line will not

have any impact on the rock environment. By initiation of erosion during the construction, the local erosion processes might endure also in the phase of operation and so last several years.

Air impacts

During construction of proposed power line, temporary unfavourable impacts as a result of machines transport and the work on building sites are expected in the form of increase of dustiness and noisiness at the access roads, increased proportion of exhaust fumes and increased dustiness on building sites and in the corridor of construction during the construction work, mainly in the sections of arable soil.

During operation, the production of waste heat and also heating and drying of air in its immediate proximity might occur. During the corona discharges, which occur on high voltage line, the electrochemical interactions with air molecules N_2 and O_2 occur, and the moderate increase of content of nitrogen oxides NO_x and ground level ozone O_3 can be expected. Also the interactions with polluting substances in air might occur (pollutant emissions, exhaust fumes, etc.). In the direction towards the high voltage line, the gradient of electrostatic field is increased and so the possibility of increase of concentration of ions, polarized molecules, aerosols, and dust particles of bipolar character is created. Decay products of radioactive particles might be bound to dust particles, which might cause the increase of ionizing radiation under the high voltage line. The stated impacts are negligible considering quantity and do not represent possible source of danger to air quality or to microclimatic conditions.

Impacts on surface and ground waters

Impacts on surface waters are related only to the phase of construction and have the character of risk. They represent the risk of pollution of watercourses related to the movement of transport and construction machines through access communications and long term occurrence of construction machines in building sites. Greatest risk is represented by the leakage of oil substances from construction machines. From this aspect, the most sensitive ones are areas of watercourses, threatened in its proximity by work, or direct crossing of machines through them. The problem ones might be also the seasons of increased water state and intensive precipitations.

Negative impact on surface waters can be caused by construction activity in the areas of watercourses important from the aspect of water management, which are Nitra, Osliansky brook, Kľak and Hron watercourses in the affected area. Water areas as waterworks Veľké Uherce and waterworks Horná Ždaňa are located outside the proposed route of power line and so out of reach of possible negative impact during the construction of line.

Also the impacts on ground waters are related only to the phase of construction and have the character of risk. Risk for ground waters and for water sources is represented by the possible leakage of oil substances from construction machines, but also by ground work by construction of tower foundations in the sections with increased level of ground waters. The risk extent also follows from the permeability of watered layers and the presence of impermeable covering layers.

To prevent the pollution by oil substances it is necessary to check the technical condition of machines, to use the absorption equipment by the leakage of oil substances, to mine out the polluted soils and to dispose that in compliance with the laws of waste management.

The most risky localities form the aspect of spatial position of impacts are the immediate surroundings of water management objects, or sources located near the proposed line corridor. The closest water management sources and their PZs are PZ of II. degree of water management source in cadastral areas Horná Ves, Pažiť, Veľké Uherce and PZ of II. degree of water management source in cadastral area Veľké Pole. The route of proposed power line does not reach any PZ of water management source.

In the area of Bukovina and Dolná Ždaňa, where the mineral springs are registered, the negative impacts on qualitative and quantitative features of these sources may not occur during construction activity.

The operation of proposed power line will not have any impact on surface or ground waters.

Impacts on soil

Soil impacts are related mainly to the phase of construction. They represent mainly the risk of erosion and landslide related to the movement of construction machines in the corridor of PZ, particularly on arable soil, extension and adjustments of unhardened communications, forest growths felling and wood manipulation and felling of non-forest tree vegetation.

Soil removal is expected mainly in the places with steep hills with water activity i.e. in dominant part of line route going through Tríbeč and Vtáčnik mountains. After the removal of vegetation cover, the significant part of soils will be predisposed mainly to pothole erosion, sporadically by the impact of inappropriate actions (e.g. felling of hills by ground work) hill movement might be caused - erosions of local character.

Also the mechanical damage of soils is presupposed by the movement of construction machines – permanent firming of arable and under surface layer in the protective zone of line and that is mainly on agricultural soil comprised of arable soil – mainly in end sections reaching the Oslany and Žiar basin.

In the areas with removed vegetation cover, wind and water erosion will have effect during the construction and in the initial period of operation.

Impacts on soils during the construction of line will be represented by temporary occupations of soils in the space of protective zone of new line, building sites and in the routes of access roads

The line operation will not have any impact on the soil quality. By initiation of erosion and removal of soil during the construction work the given impact might be irreversible in extreme cases, or might endure also in the phase of operation and last for several years. Soil impacts during line operation will be also represented by permanent soil occupations in the areas of tower sites in the area of protective zone of new line.

During the line operation the towers positioned on arable soil will be permanent obstacle to agricultural activities.

Impacts on vegetation and biotopes

Negative impacts on vegetation are expected during preparation work and during construction (felling, machine movement in PZ of line and access roads, ground work at tower feet, tower mounting, wire drawing). The following impacts are concerned:

- permanent impacts on continuous forest communities of Tríbeč and Vtáčnik mountains foothill and on scattered forest communities in agricultural landscape (on deforested areas of extended corridor of lines consequently the invasion of more aggressive species is expected),
- impact on non-forest linear vegetation of hillside growths, copses, windbreaks, shrubs along erosion furrows and alike, related to the disposal of vegetation section,
- disruption of meadow communities,
- possible degradation of linear wet localities in case of machine movement through them,
- possible unintentional spreading of unoriginal and invasive species into the landscape caused by the entry of construction machines into the area,
- increased synantropization and ruderalization, which will cause the spreading of weed species of plants,
- potential decrease of biodiversity of area as a result of possible levelling of terrain depressions by excavation material,
- degradation of water or bank vegetation by possible pollution of watercourses by oil substance leakage from construction machines.

The construction of proposed power line is related mainly to the felling of forest and non-forest vegetation with respect to direct impacts on vegetation.

The impacts of realized felling will be permanent. The felling in the stated sections will cause permanent disposal of willow-poplar, oak-hornbeam, beech or mixed forests mainly within the geomorphologic units Tríbeč and Vtáčnik - thus the direct disposal of part of biotopes, hiding places, nesting sites or thinly mobile fauna. Tree layer will be disposed of; there will be disposal of shrubby layer and herbal copse as a result of manipulation with wood mass and ensuring of access. By the felling, the edge of forest biotope will be substituted by another

type of biotope, which will be changing its character to clearing with herb or shrub superiority as a result of successive processes and regular interventions because of maintenance and operation of line. New clearings might disturb the integrity of forest – mainly in variants which cross bigger forest units (HV1 over Radobica, HR2 over Hrabičov). Variants leading through the edges of forest growths will liquidate important ecotone zone of forest - mainly variants HV1 and HV2 by Horná Ves.

With respect to the stated the complex impact on forest biotopes can be considered as potentially important with the impact on ecologically important types of forest biotopes, however with minimal spatial impact.

The route of proposed power line crosses besides forest also the linear and small surface components of grown vegetation, which is in the present types of agricultural landscape bound to hillside growths of local watercourses, ravines, erosion furrows, pasture groves, windbreaks an other grown lines bordering particular agricultural areas. By routing of proposed power line the felling of these lines of vegetation with the risk of disruption of continuous herbal vegetation cover related also to disruption of soil cover will occur.

The direct impacts on the current vegetation cover will occur in the affected area also by other construction activities, which are e.g. excavation of towers sites foundations, installation and mounting of towers, wire drawing, building of temporary building sites, movement of machines in protective zone and on access roads. The permanent disposal of cover will for sure occur in areas designated for installation of towers of proposed power line, which will be substituted by built-up areas – concrete tower feet. Other activities will cause mainly the temporary impacts or change to another type of biotope. Their ending up will be continuous after finish of construction activities, with possible restoration only after few years. From this aspect, the possible spreading of ruderal, invasive and unoriginal species from protective zone to forest, or surrounding biotopes is a great risk.

In the period of construction, pollution or degradation of other components of environment represent the risk of impact on biotopes and vegetation. It is not possible to exclude them in case of pollution of water and soil environment by leakage of oil products and other dangerous substances from machines and transport means used for dismantling, construction work or felling of growths. In case of elaborate maintenance and checking and also following of operational regulations, these impacts can be considered as unlikely, but with respect to the extent and area of work it cannot be definitely excluded, for example in case of extraordinary and emergency situations. The extent of impact on vegetation and biotopes is expected to be of local character in this case, but with long term effect. It is possible to include also the impact of hydrologic regime of surface and ground water to potentially indirect impacts, which might occur during processing of access roads, ground work and alike. Unfavourable impact might appear in case of non-forest wetland biotopes, which have specific and usually vulnerable water regime. In the affected area it is not possible to exclude this risk in case of effusions and springs in the area of erosion furrows, which locally condition the specific representation of species.

After finishing the realization of construction work the extent of impact on vegetation will be reduced significantly. During the operation of proposed power line the impacts on vegetation are expected in the extent of regularly realized tree felling in the protective zone of line. In the places of tower installation we can expect increased occurrence of weed species or also natural seeding of caught shrubs and trees (e.g. elderberry, hawthorn, dog rose, aspen or goat willow), which is a positive impact in mainly monotonous agricultural landscape.

Potential impact can be expected only in case of regular maintenance of facilities or in case of removal of failures, which will be related to the movement of machinery in the route of line, it is likely that the same access roads as during construction will be used. The extent of damage of vegetation cover related to that can be considered as insignificant compared to the construction and from time aspect as unimportant.

More significant impacts on vegetation cover are expected in the sections which lead through forest growths. In the width of protective zone, the regular felling of tree vegetation will be realized, by which the biotope character will be changed in certain cycles. After the elimination of shrubby component, the species composition of copse will be changed mainly

in favour of more photophilous species and in the next period the species composition will be adapting to advancing succession of trees, e.g. by invasion of some forest species and total reduction of diversity. From the aspect of value those are common ruderal biotope types which do not belong to important ones.

Locally in the area of PZ of line also the occurrence of more important biotope types were registered as biotopes of national importance blackthorn and hazel shrubs and mesophilic forest edges. These represent the succession stage, which naturally changes to the forest stage without external interventions. The regular removal of natural seeding under the power line can be considered as activity that supports the preservation of these transitional stages on suitable places. In the PZ of line in forest landscape the occurrence of some Orchidaceae species including protected ones is not rare, for which the cyclic interventions into tree component and sporadic disturbance of vegetation cover are beneficial.

From the aspect of impact on forest and non-forest biotopes based mainly on the quantitative extent, these variants can be preferred within the variant sections: HV2, VP3 and HR1.

As a result of realization of proposed activity the direct impact on existing biotopes and tree vegetation is expected mainly in relation to the protective zone of proposed power line. Mainly within forest growths there are significant impacts, the result of which is the direct liquidation of important forest biotopes. In total, the extension of PZ of proposed power line related to the felling will affect the following types of forest biotopes:

- Ls1 Riparian forests (biotope of European importance of priority interest 91E0*)
- Ls 2.1 Oak-hornbeam Carpathian forests, (biotope of national importance)
- Ls 4 Tilio-Acerion forests of slopes, screes and ravines (biotope of European importance of priority interest 9180*)
- Ls 5.1 Asperulo-Fagetum beech forests (biotope of European importance 9130)
- Ls 5.4 Medio-European limestone beech forests (biotope of European importance 9150)

The direct impact on existing biotopes can be expected related to the construction of newly installed foundations – tower feet. In that case the direct danger of grass-herb biotopes is presupposed:

- Tr1 Semi-natural dry grasslands and scrubland facies on calcareous substrates (biotope of European importance 6210)
- Lk1 Lowland hay meadows (biotope of European importance 6510)
- Lk 6 Mountain and lowland wet meadows (biotope of national importance).

If the grass-herb biotopes are not liquidated directly by construction, or indirectly by crossing, the maintenance of protective zone of proposed power line will not be a problem for these biotopes, quite the opposite, the regular removal of tree successive vegetation keeps these biotopes in favourable condition.

Impacts on fauna

Selection of locality is crucial for minimization of number of killed birds due to collisions. There is the highest risk for flying in case of bad weather conditions as strong wind, rain, mist, dark nights. Under these conditions the migrating birds tend to decrease the flight height.

Also the specific technical solutions might cause the killing on power lines as a result of collision. For example on 400 kV lines the highest wire connecting top points of towers is considerably thin and difficult to be noticed for flying birds.

The complex of forest and open biotopes is attractive for nesting and food hunting of wide spectrum of raptors, owls and Ciconiiformes which often hit the power lines. From the forest biotope (where they nest) these fly to meadows and pastures to hunt food – Golden Eagles (*Aquila chrysaetos*), Lesser Spotted Eagles (*Aquila pomarina*), Black Storks (*Ciconia nigra*), Eurasian Eagle-Owls (*Bubo bubo*), Northern Goshawks (*Accipiter gentilis*) and Eurasian Sparrowhawk (*Accipiter nisus*).

Although the bottom land of rivers Nitra and Hron is important bird migration corridor, the power line route does not cross these migration corridors in the most of route. The power line route crosses the bird migration corridor in Ponitrie in the section Pažiť – Horná Ves, where

the necessity of making the power line visible is created.

The power line route in the section Bukovina – Horná Ždaňa is located among nesting and hunting sites of wide spectrum of forest species of nesting birds (nidificants) of European importance. The necessity of making the proposed power line visible is created here too.

Impacts of realized felling by extension of existing protective zone will be permanent. The felling related to construction and also regular maintenance will cause permanent liquidation of forest growths and thus direct liquidation of biotopes, hiding places, nesting sites or thinly mobile fauna.

Cyclically (periodically) realized liquidation of vegetation in PZ causes cataclysmic shocks for the species existence (e.g. shrub avifauna). By the felling new unoriginal biotope is created into which unoriginal species get from external environment. By gradual growing of vegetation, the biotope and also the community of species tending to return to the original community change. Only species capable of fast migration adapt to the periodical liquidation of vegetation with long interval. Other species communities disappear at the place. By felling realization there is expected:

- reduction of the population density of original species of fauna as a result of liquidation of tree growths in the protective zone of proposed power line,
- fragmentation of biotopes caused by liquidation of trees in bank growths and field copses causes the creation of islets which will lose its functionally e.g. as nesting biotopes,
- the change of biotope and unoriginal species of fauna getting into the original community
 of forest biotope as a result of liquidation of tree growths in the protective zone of
 proposed power line.

Construction activities in protective zone of line will mean the disturbance of animals, which might cause the temporary leaving of given area by mobile fauna species. For thinly mobile fauna species the impacts of construction activities will be even liquidating, e.g. for soil organisms by tower foundations excavation work. By the entry of construction machines to the landscape area, new temporary landscape-structural elements will be created – the road lines, through which the fauna species will migrate easier into new environment. The areas filled with water will be created during construction activity, which migrating amphibians might enter with the purpose of copulation and egg laying. By the entry of machines or by tower building (especially in forest biotope) the restriction of biorhythms of fauna species (raptors) living here might occur, which might lead to the leaving of nesting sites.

Nesting possibilities of birdlife will be made worse only locally by extending felling, without impact on nesting possibilities of standard and other important forest species of birdlife. The felling as well as the construction realized outside the nesting period eliminates the damage of possible active nests or nesting in surrounding growths. The compensation for the local impact on nesting possibilities is the installation of artificial nests for raptors on selected towers of proposed line based on the consultations with ŠOP of the SR.

The barrier effect of route of distance line does not appear by terrestrial migration of animals. The facility does not constitute an obstacle restricting the migration and on the contrary, several species use the protective zone for movement (e.g. huntable species of vertebrates, reptiles).

In comparison to the current state the risk of bird collisions by construction of proposed power line will be increased. Bigger species will be affected more (raptors, owls, storks) – than small species (songbirds). Young birds flying out of the nests will be affected more than the adult birds. If the objects making DS visible are not noticeable during night, the birds migrating during the night will be more affected than day migrants. If the objects making DS visible are not noticeable during mist and poor visibility, the collisions of birds of whole species spectrum might occur.

The installation of objects making proposed power line visible to minimize the risk of bird collisions in particular tower spans and installation of artificial nests for raptors on selected towers is recommended. Both phenomena will improve significantly the environmental parameters of proposed activity from the aspect of avifauna.

The necessary deforestation of PZ (tree felling) is recommended to realize in the period out of bird nesting, i.e. from September to the end of March.

Impacts on landscape

The construction and operation of proposed power line will not change significantly the current representation of types of current landscape structure. The rate of impact of operation of line on the landscape structure of forest, which is represented in the landscape, will be periodically affected by necessary felling of trees in the protective zone of line in the forest units mosaic-situated in the whole affected area — and thus with different length depending on the route variant. This impact will be most perceivable after freshly renewed maintenance — deforestation of PZ of proposed power line, when such "cleared" corridor will be in sharp contrast to surrounding forest area. On the contrary, by the progress of succession in PZ the given impact will be mitigated.

In the affected area the system of overhead power lines already exists so the proposed activity will not mean qualitatively new phenomenon. Moreover, the route of proposed power line is localized in concurrence with the existing power lines.

Negative impacts on landscape structure will be the felling related to the crossing of linear elements of non-forest tree vegetation, but with respect to their extent it is not a significant impact. Temporary negative impact on landscape structure can be the deforested lines created by possible adjustment of existing forest access roads. These impacts will endure after the construction, but will be gradually ending up by repeated reclamation, or forestation of created lines.

The proposed power line will affect the landscape scenery in two ways – by the actual construction elements of proposed power line (towers, wires, objects making DS visible) and by creation of deforested stretch in forest growths. On deforested areas only the first way will be applied, which can be considered as more subtle. On forested areas the combination of both ways will be applied, the deforested stretch of PZ of proposed power line will be visually more massive and potentially more visible from bigger distance. Therefore potentially, because the forested areas are usually located in geomorphologically more divided area, which increases the probability that the deforested stretch of PZ of proposed power line will be hidden behind the horizon (depending on the place of observer). The higher frequency of occurrence of observers capable of perceiving the landscape scenery can be of course expected near power lines in open landscape. It is also necessary to say that the landscape scenery of deforested areas is usually more valuable (not always), than the landscape scenery of deforested areas, often more or less anthropogenically visually polluted. Uniting of power lines into common corridors is a significant measure for minimization of their impact on landscape scenery.

The specific feature of this part of affected area is the scattered settlement – "štále", which nowadays often has the function of recreational accommodation. In this relation the value of this area can be negatively affected from the aspect of landscape perception of visitors.

The ecologic stability of affected area is high, with sufficient spatial representation of ecologically stable landscape-ecological elements. The construction and operation of line will not have impact on total ecological stability.

Impacts on protected areas

The dominant part of route of proposed power line leads through the area of first degree protection according to the Act no. 543/2002 Coll. on Nature and Landscape Protection as amended. In circa 10 - 12 km long section (depending on variant) it comes also through CHKO Ponitrie of second degree protection.

The purpose of declaration of CHKO Ponitrie is the protection and enhancement of nature of Tríbeč and Vtáčnik mountains. The richness of geological subsurface and climate creates here the conditions for rich species variety of nature. More than 92 percent of area belongs to the forest land fund. Totally there are 101 species of trees, from which 73 are the original ones.

From the representatives of fauna of CHKO Ponitrie the attention should be paid to the occurrence of Eurasian lynx and wild cat as the original felids. There is also deer, roe and wild boar wildlife in lower altitudes. From the rare birds of prey there is Lesser Spotted Eagle,

Eastern Imperial Eagle, Short-Toed Snake Eagle and European Honey Buzzard in the area. The proposed power line reaches CHKO Ponitrie in the areas of municipalities Horná Ves, Radobica and Veľké Pole. The affected area is used for forestry.

The landscape character of CHKO forms also the typical scattered settlement of German colonization the so-called "štál" settlement. It is characteristic of scattered separate houses or house groups which grew broader in the past the same as families, after which these "štále" are usually named. In the surroundings of houses intensive farming was realized – small fields, pastures, orchards. Further from settlement there were mowed meadows for ensurement of fodder for winter feeding of farm animals. The individual "štále" were divided by preserved original forest growths, used as firewood and building wood. The violent displacement of German population after Second World War and the changes of economy during socialism strongly affected the original character of landscape, but the main features remained in the shape of mosaic of mowed meadows, copses and original forests.

The PZ has in forest areas effect of certain barrier and fragmentation of ecosystems mainly in relation to higher vertebrates. On the other hand, it creates suitable food biotopes and space for migration of some terrestrial animals.

Although overall the course of route is well accessible by forest roads and roads used by inhabitants of štále and they will be suitable after certain adjustments, with respect to the structured terrain it will be necessary to build some sections of new roads inside the PZ corridor to enable the access to all towers. The impact will appear locally, but the resultant effect will have area character – the system of existing forest roads will be extended. The roads will be concentrated approximately in the route of PZ, so the bigger fragmentation of ecosystems or increase of barrier effect will not occur. In case of use of cableways in more extreme sections, the impact on soil and vegetation cover and so on animal biotopes will be significantly smaller.

The impact of proposed power line on European system of protected areas (NATURA 2000) is described in the chapter V of Final Record.

Impacts on territorial system of ecological stability

Ecological stability of affected area is high with sufficient spatial representation of ecologically stable landscape-ecological elements. From the elements of territorial system of ecological stability these are affected by the routing of proposed power line:

- Supra-regional bio centre Vtáčnik (variants HV1 3)
- Regional bio centre Tríbeč (variants VP1, VP2)
- Regional biocorridor Píľanský brook (variants VP1 3)
- Regional biocorridor Kl'ak brook

Identification of local elements of ÚSES (territorial system of ecological stability) follows from the terrain research of elaborator of the Environmental Impact Statement. In the affected area these elements of MÚSES are located, through which the proposed power line leads:

- local biocorridor hydric Cerová
- local biocorridor hydric Čierny brook
- local biocorridor hydric Župkovský brook
- local biocorridor hydric Pažiťský brook
- local biocorridor hydric Osliansky brook

Parameters of local biocorridors in agriculturally used landscape can be locally reached also by hardened field roads with both side linear plantation of trees and shrubs, the treetops of which are overlapping.

Local biocorridors are weakened on some places on regulated and felled sections but still create minimally important landscape-forming elements by its side vegetation (important landscape segments) and also fulfil the function of refugia for small animals and hygrophilous plant species.

Local bio centres represent bigger forest complexes in the affected area, which are evenly positioned in the course of almost whole route. Especially there can be singled out the larger growths in the surroundings of Nebojsa valley, forest complex Mikušová above Hrabičov, forest growth edges Chlmok above Horná Ves. Great part of forest units, which could

represent the bio centre of local level, is concentrated within the area of supra-regional biocorridor Vtáčnik.

It is possible to really exclude the worsening of impact on biocorridor functions in comparison to the current state. The perpendicular transition of line through the hydric biocorridors is not a substantial problem for their functionality. The proposed power line will not affect the functionality of particular elements of ÚSES, the functionality can be temporarily restricted during construction of relevant section of line.

Impacts on economy

In the route of proposed power line there is no object of industrial production. The only negative impact on industrial production is the transition of proposed power line through the area defined in the valid territorial plan of municipality Oslany as the industrial park.

The realization of proposed power line will have indirect positive impact on overall development of region including industrial production, which will follow from new possibilities of supply of electric energy for given region given by reconstruction and qualitatively by new connection. Indirect positive impact on industry is represented by production and finish (zincification) of new towers, which are necessary for the construction of new power line.

Temporary negative impacts will occur by crossing of route of proposed power line with the existing roads, mainly by crossing of important communications – mainly the road II/512, which the route crosses several times (variants HV2, HV3, VP1, VP2), near the settlement Cerová and near the municipality Veľké Pole. The route also crosses the road III/05121 near the municipality Radobica and the road III/05122 near the municipality Hrabičov. By wire drawing through these and other traffic lines, the traffic restrictions will exist temporarily.

Also technical infrastructure, which is represented by other overhead lines (400 kV, 2x110 kV, 110 kV, 22 kV) and other distribution systems - gas lines, water conduits and sewerage systems, the protective zones of which have to be respected, will be affected by the proposed power line. The impact on elements of infrastructure in the built-up areas of affected municipalities is not expected. The proposed power line will have temporary impact on the operation of the infrastructure, for which the realization of adjustments and relaying is presupposed related to the construction of proposed power line. It is mainly 110 kV line and 22 kV line.

The line operation will not impact the operation of radio communications, which will be ensured by proposed cross-section of line conductors, which meet the condition that intensity of electric field with nominal voltage of 400 kV does not exceed the amount of 16.0 kV.cm⁻¹ (according to STN EN 50 341 - 1) under normal atmospheric conditions.

The proposed activity will negatively impact the tourism during the construction caused by outputs related to construction work (increased frequency of transport, noise, air pollution) and the landscape scenery during operation (more details in the part "Impacts on landscape").

The forestry will be significantly affected by the construction and operation of proposed power line with respect to the significant forestation of affected area, that is mainly by permanent (repeated) felling in the extended PZ of power lines, temporary felling (in case of adjustments of existing access roads), substitutive foresting and care for planted trees in the new PZ of power lines and reclamation of temporarily occupied areas.

The area of felling in the PZ of power lines remains as the forest land, but with the restriction of fulfilment of forest function, or it can be temporarily excluded for the period of construction – circa 2 year period. After the construction on these forest lands, there will be reclamation executed by foresting and consequent care for trees which will be regularly felled. The alternative is also the leaving the area to the natural succession. The length of restriction of fulfilment of forest function in the areas of PZ is related to the length of existence and operation of proposed power line, which is by current technological possibilities approximately 80 years. The time expectation of whole realization is 1.5 years with the presupposition of felling in 1 non-vegetation season. The construction will be realized in the whole length of route simultaneously.

With respect to the mosaic character of landscape structure, the establishment of

construction yards on forest areas is not expected, thus neither the temporary exclusion from the fulfilment of forest functions.

Impacts of construction of proposed power line on agricultural production will appear as a result of temporary use – occupation of some areas of agricultural soil for non-agricultural purposes within the areas needed for the construction of individual towers (manipulation areas, access routes and alike). It can be said that these temporary impacts will be minimal within the areas in the affected area.

Minute increase of permanent negative impact on agricultural use of landscape in the areas of arable soil will occur by the line operation, which follows from the permanent occupation of areas of tower foundations of proposed power line. The restriction of use of irrigation is applied in the PZ of line. The impact is negligible with respect to the dominance of arable soil and agricultural use of affected area and its surroundings.

Assessment of particular variants and selection of optimal variant in the section 1

Variant HV1 is preferred by:

Ministry of Economy of the SR

Variant HV2 is preferred by:

- The elaborator of the Environmental Impact Statement
- Ministry of Economy of the SR
- Ministry of Agriculture and Rural Development of the SR
- Ministry of Environment of the Slovak Republic, Department of State Administration
- municipality Radobica
- District Environmental Office Trenčín
- District Environmental Office Banská Bystrica
- District Forest Office Trenčín

Variant HV3 is preferred by:

- municipality Oslany
- municipality Radobica

Analysis and selection of optimal variant:

With respect to the above stated preferences and also the assessment of environmental impacts of particular variants it is possible to exclude variant HV1. Although this variant is stated as the preference of Ministry of Economy of the SR, but only as one from two variants, for which Ministry of Economy of the SR expects the smallest negative environmental impacts. Also municipality Radobica prefers two variants in its standpoint – in this case HV2 and HV3. At the public consultations of proposed activity they supported variant HV3 (they did not state the arguments; that can be understood as the support of neighbouring municipality Oslany).

Variant HV3 is definitely preferred only by municipality Oslany. Variant HV2 is not in conflict with the built-up area of municipality but it would negatively affect their development plans. In the locality Buclovné right before crossing of Osliansky brook it leads over the motocross area, where the area of polyfunctional building partially designated for housing is located. By transition from the road II/512 to the locality Sítenie it leads through the area defined in the municipal territorial plan as the industrial park.

In case of variant HV2 in the section 1 there are 48 towers proposed, from that 39 on agricultural soil and 9 on forest soil. In case of variant HV3 in the section 1 there are 51 towers proposed, from that 34 on agricultural soil and 17 on forest soil. Variant HV2 will require smaller number of towers and significantly smaller (almost by the half) number of towers on forest soil.

Section 1 has in case of variant HV2 and HV3 the same length - 11 400 m, from that 3 769 m on forest lands in case of variant HV3 or 1 385 m on forest lands in case of variant HV2. The extent of felling on forest lands is related to that - 196 697 m² in case of variant HV3

and 83 675 m² in case of variant HV2.

In case of variant HV3 compared to variant HV2, additionally the liquidation of biotope of national importance Ls 2.1 - Oak-hornbeam Carpathian forests will occur in total extent of 43 224 m² and the biotope of European importance of priority interest Ls1 – Riparian forests in total extent of 22 391 m². In case of variant HV2 these biotopes will remain preserved, on the contrary in comparison to variant HV3, the liquidation of 3 410 m² of biotope of European importance of priority interest Ls1 - Riparian forests will occur.

The section 1 of proposed power line goes through CHKO Ponitrie and ÚEV Vtáčnik (SKUEV0273). The substantial part of ÚEV Vtáčnik is located in the area of CHKO Ponitrie. From the total length of the section 1 of proposed power line 11 400 m, in case of variant HV2 4 230 m are in these protected areas and 6 290 m in case of variant HV3. Bigger impact on protected areas by 2 060 m in case of variant HV3 is related only to CHKO Ponitrie.

On 04/19/2013 MoE of the SR consulted the proposal of Final Record with the representatives of proponent, elaborator of Environmental Impact Statement, Ministry of Agriculture and Rural Development of the SR and municipality Hrabičov. The consultations were related also to the selection of optimal variant in the section 1. The representative of elaborator of Environmental Impact Statement stated that in the Environmental Impact Statement variants HV2 and HV3 were presented as identically suitable, while the final selection of optimal variant remained open – according to how the commenting on the Environmental Impact Statement would end up.

According to the representative of elaborator of Environmental Impact Statement, from the commenting on the Environmental Impact Statement the information about bigger negative impacts of variant HV2 had arisen mainly on the citizens of settlement Rudica (according to the representative of proponent in this locality also the felling in growths in bottom land of watercourse would occur), but also in the area of municipality Oslany. He stated that on the contrary, there were no important objections to variant HV3. No one from attending persons of consultations had objections to this standpoint. MoE of the SR made sure based on the detailed analysis of standpoints to the Environmental Impact Statement that there were no important objections to variant HV3 and recommends variant HV3 as the most suitable one.

Also the requirement of municipality Radobica is related to the section 1 to more divert the routes of HV2 and HV3 from dwellings (Cerová and Banské) so that the built-up area would be bypassed and the specific character of scattered area would be preserved. They recommend to place the route of power line to the forest growths and to hide it from the view of inhabited objects. In the given section the power line is proposed in the concurrence with the existing 2x110 kV line V7747/7747. This power line gets to the human dwellings the closest near the settlement Hvojníkovci – circa 30 m between the edge of its PZ and the closest building. By the construction of proposed power line this distance will not be changed because the common PZ of both power lines will be extended to the opposite side from the affected building. The distance of proposed power line from the settlement Cerová is circa 260 m and from the settlement Banské circa 180 m. With respect to the stated it is unreasonable to create new corridor of power line and certainly not in forest growths where the negative environmental impacts are markedly more significant.

Also the requirement of District Environmental Office Trenčín is related to the section 1 to place the towers in bank growth of Cerová brook based on the realization project considering the most preserved parts of priority biotope of European importance 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior. The stated requirement can be recommended.

Assessment of particular variants and selection of optimal variant in the section 2

Variant VP1 is preferred by:

District Forest Office Banská Bystrica

Variant VP2 is not preferred by any participant in the assessment process

Variant VP3 is preferred by:

The elaborator of the Environmental Impact Statement

- Ministry of Economy of the SR
- Ministry of Environment of the Slovak Republic, Department of State Administration
- municipality Veľké Pole
- municipality Píla
- District Environmental Office Banská Bystrica
- District Environmental Office Banská Štiavnica (as the respective authority of state administration of nature and landscape protection)
- District Forest Office Žarnovica
- District Mining Office Banská Bystrica
- Banská Bystrica self governing region

Analysis and selection of optimal variant:

All participants in the assessment process who have commented on the variants in this section, except for District Forest Office Banská Bystrica, prefer the variant VP3. District Forest Office Banská Bystrica prefers the variant VP1. They disagree with the variant VP3 because the proponent "further suggests the use of route of dismantled power line and ignores the fact that by dismantling of line the linear construction as such was liquidated and by that the restriction of use of affected forest lands was liquidated" and also because "the authorities of the state administration of forest management can not respect the data stated in the table 52 (p. 256 in the Environmental Impact Statement), which do not respect the current condition and therefore they are misleading".

According to the Environmental Impact Statement it is not the dismantled power line. In the Environmental Impact Statement it is stated: "From the settlement Banská the route of variant VP3 leads in its total length entirely in concurrence with the existing 2x110 kV line V7747/7747 in south-eastern direction...". Power line 7747 is marked also in the scheme "Transmission system of the Slovak Republic", the state as to 12/31/2012 (http://www.sepsas.sk/seps/images/schemasiete/ESS_2012_12_31.png).

The variant VP3 is the shortest one – 5 900 m compared to 6 500 m in variant VP1 and 6 200 m in variant VP2. It will require the smallest extent of felling – 42 527 m² compared to 102 779 m² in variant VP1 and 101 637 m² in variant VP2. It has the smallest impact on significant biotopes. It has the smallest impact on protected areas. It bypasses the area of mining area of Veľké Pole – Zeller and human urban areas. With respect to the stated MoE of the SR considers variant VP3 as the most suitable one.

Assessment of particular variants and selection of optimal variant in the section 4

Variant HR1 is preferred by:

- Ministry of Agriculture and Rural Development of the SR
- District Environmental Office Banská Štiavnica (as the respective authority of state administration of nature and landscape protection)
- District Forest Office Banská Bystrica
- District Forest Office Žarnovica

Variant HR2 is preferred by:

- The elaborator of the Environmental Impact Statement
- Ministry of Economy of the SR
- Ministry of Environment of the Slovak Republic, Department of State Administration
- municipality Hrabičov
- District Environmental Office Banská Bystrica
- Banská Bystrica self governing region

Analysis and selection of optimal variant:

In case of variant HR1 in the section 4, there are 14 towers proposed, from that 10 on agricultural soil and 4 on forest soil. In case of variant HR2 in the section 4, there are 15 towers proposed, from that 6 on agricultural soil and 9 on forest soil. Variant HR1 will require smaller number of towers and significantly smaller (by more than a half) number of towers on

forest soil.

Section 4 has in case of variant HR1 the length of 3 400 m, from that 495 m through forest growths. In case of variant HR2 it has the length of 3 500 m, from that 1 471 m through forest growths. The extent of felling on forest lands is related to it - 30 735 m² in case of variant HR1 and 101 499 m² in case of variant HR2 (more than treble the variant HR1).

According to the expert review of elaborators of the Environmental Impact Statement in case of variant HR2 there is the intervention expected in the biotope of European importance Ls5.1 - Asperulo-Fagetum beech forests and the biotope of European importance Ls4 - Linden-maple scree forests in the total area of 20 000 m². The intervention in the biotope of European importance Ls4 - Tilio-Acerion forests of slopes, screes and ravines is expected also in case of variant HR1, according to the Environmental Impact Statement in the extent of 11 983 m². In both variants also the impact on the biotope of European importance Lk1 – Lowland hay meadows will occur. The operation of proposed power line does not have negative impact on this biotope, quite the opposite - the regular removal of tree successive vegetation keeps this biotope in favourable condition. The liquidation of this biotope will occur only in places of tower foundations. Also the construction work will affect negatively this biotope. Bigger impact on this biotope will be in case of variant HR1.

Considering the impact on population, in the Environmental Impact Statement in case of variant HR1 there are the following facts stated: the route near the settlement Vicianovci up to 60 m, settlement Horní Zajacovci distant circa 100 m and the route of line is covered by thick growth of non-forest tree vegetation, settlement Kristiánovci distant circa 140 m and the line route is covered by forest growths. In case of variant HR2 only the settlement Kristiánovci distant circa 140 m is stated and line route is covered by forest growths. It follows from the stated that the important impact can be expected only on the settlement Vicianovci in case of variant HR1.

The elaborator of the Environmental Impact Statement prefers the Variant HR2. In the chapter "V. Comparison of variants of proposed activity and the proposal of optimal variant" in the Environmental Impact Statement he states the following reasons: "In the section Hrabičov - Kristiánovci, which bypasses the municipality Hrabičov, the preferred variant is not that unambiguous, but variant HR2 can be considered overall as more suitable also because of unacceptability of variant HR1 for the municipality."

On 04/19/2013 MoE of the SR consulted the proposal of Final Record with the representatives of proponent, elaborator of Environmental Impact Statement, Ministry of Agriculture and Rural Development of the SR and municipality Hrabičov. The consultations were related mainly to the selection of optimal variant in the section 4. The representatives of proponent, elaborator of Environmental Impact Statement and municipality Hrabičov objected to variant HR1. The objections resided mainly in cumulative impact of several power lines on municipality and in the conflict of proposed power line with development plans of municipality. The route of proposed power line crosses the areas which are supposedly designated for individual apartment construction. The representative of Ministry of Agriculture and Rural Development of the SR reminded that in the standpoint of this ministry to the Environmental Impact Statement it was required possibly yet before the issue of Final Record to realize the separate consultation with proponent, elaborator, municipality representatives, forest managers and with attendance of respective authority of forest management state administration to repeatedly assess the proposed variants HR1 and HR2. It was agreed that the proponent and elaborator of Preliminary Environmental Study would consult the variant HR2 with the affected district forest office and the results of these consultations would be taken into account in the elaboration of Final Record.

On 05/06/2013 variant HR2 was consulted by the representatives of proponent, elaborator of Environmental Impact Statement, municipality Hrabičov and District Forest Office Žarnovica. The attendants of consultations agreed on acceptability of variant HR2, if it would be optimized in the following way: The route of variant HR2 will be prolonged along the edge of forest unit Mikušová reaching over the ridge, where it will break and lead through permanent grass growth under the ridge from the side of valley Čierťaže. Before the partially built-up area used as settlements in Čierťaže valley the route will repeatedly move through the ridge

and in the original break point it will connect to the original route of variant HR2. With respect to the stated, MoE of the SR **recommends variant HR2 as the most suitable one**.

V. OVERALL ASSESSMENT OF IMPACTS OF PROPOSED ACTIVITY ON PROPOSED PROTECTED BIRD AREAS, AREAS OF EUROPEAN IMPORTANCE OR CONTINUOUS EUROPEAN SYSTEM OF PROTECTED AREAS (NATURA 2000)

The proposed power line will affect the European system of protected areas (NATURA 2000) through the impacts on the following areas of European importance:

SKUEV0273 Vtáčnik

ÚEV Vtáčnik reaches 12 cadastral areas, within the affected municipalities those are the cadastres of municipalities Horná Ves, Radobica, Veľké Pole, Píla. However, the actual route of line reaches ÚEV Vtáčnik in cadastral area Radobica in variants HV1 (1900m), HV2 (2090m), and HV3 (2090m).

In ÚEV Vtáčnik 13 types of European important biotopes are the subject of protection: 91E0* - Alluvial forests with Alnus glutinosa and Fraxinus excelsior, 5130 - Juniperus communis formations, 6410 - Molinia meadows, 6430 - Hydrophilous tall herb fringe communities of plains and of the montane to alpine levels, 6510 - Lowland hay meadows, 8150 - Medio-European upland siliceous screes, 8220 - Siliceous rocky slopes with chasmophytic vegetation, 9110 - Luzulo-Fagetum beech forests, 9130 - Asperulo-Fagetum beech forests, 9140 - Medio-European subalpine beech woods with Acer and Rumex arifolius, 9180* - Tilio-Acerion forests of slopes, screes and ravines, 91G0* - Pannonic woods with Quercus petraea and Carpinus betulus, 9110* - Euro-Siberian steppic woods with Quercus spp..

Right in the line route within the ÚEV these important biotopes have been identified:

In case of variant HV1: Ls 2.1 - Oak-hornbeam Carpathian forests and Ls 5.4 – 9150 Medio-European limestone beech forests of the Cephalanthero-Fagion. Neither of these biotopes is the subject of protection in the relevant ÚEV. The impact on these biotopes was assessed as unthreatening the favourable state within their bio-geographic region. On the border of ÚEV the proposed variant crosses also watercourse Cerová with bank growths classified as biotope 91E0* - Alluvial forests with Alnus glutinosa and Fraxinus excelsior, but it is very small area in valley part – in terrain depression, which can be crossed in sufficient height so that the regular growth felling is not necessary. The original variant HV1 reaches this area only in the very edge of protected area with total area of 9619.05 ha and only by the protective zone in the length of 700 m. What is particularly important is the fact that the route of variant HV1 was the corridor of original 220kV line which was dismantled 35 years ago, from that follows that in the route there are not developed structured the most precious growths, there are maximally 35 year old growths and the growths originally creating the edge of forest next to the corridor on the same border of ÚEV and if the damage of biotopes of European or national importance occurs, it will not be a significant impact.

<u>In case of variants HV2 and HV3:</u> Ls 1.1 - Alluvial forests with Alnus glutinosa and Fraxinus excelsior *91E0, Lk 6 - Mountain and lowland wet meadows. From the two stated biotopes, biotope Ls 1.1 - Alluvial forests with Alnus glutinosa and Fraxinus excelsior, *91E0 is the subject of protection in ÚEV Vtáčnik.

Variant solutions of the route HV3, HV2 so represent bigger impact, despite that it uses the existing routes of 2x110 kV line. These variants represent bigger impact with respect to the length of crossing of ÚEV and also because of the movement from the edge to the core of UEV. As it was stated, in the line route in these variants the biotope *91EO was identified, which is in the given ÚEV the subject of protection in the length of 1 180 m along the meandering watercourse Cerová, the biotope alternates with the biotope of Mountain and lowland wet meadows Lk6, together these 2 biotopes represent the polygon of total area of 15 600 m². Based on the existing identification in the terrain, it can be stated that the most precious growths are located in direct proximity of the watercourse – further from the proposed liner route, which should not be threatened by the construction. Realization and

maintenance of line PZ will require the intervention in the biotope of riparian growth, however, the exact extent can be defined after the elaboration of realization project, knowing the exact tower placement, determination of their height, to reduce the biotope impact to maximal possible extent. Similarly the biotope impact will depend on the current height of growths.

It is possible to significantly minimize the impact on subjective important biotopes by technical and technological measures. Particularly, it is possible to bring the line closer to the existing 2x110kV line to the 35 m distance in the length of concurrence of line along watercourse Cerová (circa 2 km), simultaneously the line towers will be raised as high as possible in the given section (circa 4 pcs) and the felling for the needs of PZ will be realized only 5 m from the outside wire (which is possible with respect to the Act on Energetics), that means that the felling of PZ will be up to 50 m from the axis of existing 2x110 line (which is by 25 m less than originally presupposed). "Thanks to" such movement of PZ the felling will be necessary virtually only on forest lands (through which also the dismantled 2x110kV line led in the past) in the sufficient distance of watercourse out of actual bank forests of Cerová (except for one place). Such measures significantly regulate the impact of proposed line on ÚEV Vtáčnik from the aspect of possible impact on the important biotope and also on the subject of protection.

The presupposed occurrence of subjective biotope within ÚEV Vtáčnik is 0.0385 % of total area, which is $38\,700\,\text{m}^2$. The presupposed possible impact on biotope Ls1 will be maximally $500\,-\,600\,\text{m}^2$ when fulfilling the proposed measures, which will not have a significant negative impact on the preservation of favourable condition of biotope within ÚEV.

The area of European importance Vtáčnik is declared for the preservation of natural beech woods, in some areas with developed primeval forest structure, which are also home of big predators. The original variant HV1 reaches this area only marginally and even if the damage of biotopes of national or European importance occurs, it will not be a significant impact. Variant solutions of the route HV3, HV2 represent bigger impact with respect to the length of crossing of ÚEV and the movement from the edge to the core of UEV and with respect to the possible impact on the biotope which is the subject of protection. However, variants HV3, HV2 use the corridor of existing route of 2x110 kV line, which significantly makes these variants more favourable – new fragment of forest unit will not be created, the integrity of growths will not be disturbed, new collision line for avifauna will not be created.

SKUEV0013 Stráž and SKUEV1013 Stráž

SKUEV0013 Stráž is located in the cadastral area Veľké Pole in the mountain Vtáčnik. It is the area of 19.882 ha. The route of power line reaches the edge of SKUEV0013 Stráž by short sections in variants VP1, VP2 (60 m) and VP3 (96 m).

The area SKUEV1013 Stráž was included in the list of protected areas by amendment of the National list of sites of European importance in 2011. It is also located in the mountain Vtáčnik. It is in the cadastral area Veľké Pole on the area of 329.04 ha, it is the extension of existing SKUEV0013 Stráž with the same subject of protection. The route of proposed power line reaches SKUEV1013 Stráž by variants VP1 (1 550 m), VP2 (1 800 m) and also VP3 (860 m).

Biotopes which are the subject of protection in these ÚEV including the extension are: 6210 - Semi-natural dry grasslands and scrubland facies on calcareous substrates (important *Orchideaceae* sites), 6510 - Lowland hay meadows, 9130 - Asperulo-Fagetum beech forests. Species that are the subject of protection: *Tephroseris longifolia subsp. Moravica*.

Right in the route of variants VP1 and VP2 within ÚEV there was biotope 6510 identified - Lowland hay meadows, which are vast mowable meadows creating a significant landscape element. They are rich in species, mainly right under the top of Stráž with protected very precious species of plants, for which these areas were included in the system of areas of European importance.

By the construction of proposed power line or maintenance of its PZ the localities of most precious species will not be affected, but they are in the proximity. Those are the species *Tephroseris longifolia* subsp. *moravica* – species of European importance and protected

species Orange Lily (*Lilium bulbiferum*) – species of regional importance, Turkish Marsh Gladiolus (*Gladiolus imbricatus*), Fragrant Orchid (*Gymnadenia conopsea*), Early Purple Orchid (*Orchis mascula* subsp. *signifera*). Biotope Lk1 - Lowland hay meadows, among which this growth is classified, can be affected only by the construction of proposed power line and the maintenance of its PZ probably will not have negative impact on the favourable condition of the biotope. It is not expected that the main subject of protection and the localities of occurrence of protected plant species will be directly affected by any variant of construction of proposed power line or by the maintenance of its PZ. On the contrary, the removal of trees which overgrew the pastures and meadows uncared for in recent decades, paradoxically, can cause the improvement of favourable condition of the subject of protection.

The area of European importance Stráž SKUEV1013 was proposed as extended by vast mowable meadows, the biotope of European importance Lk1 – Lowland hay meadows. The proposal of this extension was elaborated based on the requirement of the European Commission as a result of consultation of bio-geographic seminar. The construction of proposed power line and the maintenance of its PZ affect mainly this extension of the area of European importance Stráž, the construction process could be potentially significant impact on the biotope character in case that the measures for biotope protection are not fulfilled.

During the construction the various extent of damage or liquidation of grass growth in the lines of accesses can occur. The damage of biotope can reach various degree, depending on the character of terrain and the intensity of movement of machinery and vehicles through access route. For this reason it is needed to strictly follow the measures stated in the chapter VI/3 of the Final Record.

From the submitted variants from the aspect of impacts on these areas of European importance variant VP3 is the most suitable one, which does not reach the subject of protection localized in the "original" SKUEV0013 Stráž and the route of which leads through supplementary SKUEV1013 in the shortest corridor.

VI. CONCLUSIONS

1. The final standpoint to the proposed activity

Based on the results of process of assessment realized according to the provisions of the Act no. 24/2006 Coll. on Environmental Impact Assessment and on Amendments to Certain Acts, the realization of proposed activity "Power line rated 2x400 kV Bystričany locality – Horná Ždaňa"

is recommended

provided that the conditions and realization of measures stated in the point VI.3. of the Final Record are fulfilled.

2. Recommended variant

From five sections of proposed power line three are proposed in variants.

In section 1 there is variant HV3 recommended.

In section 2 there is variant VP3 recommended.

In section 4 there is variant HR2 recommended.

3. Recommended conditions for the phase of construction and operation of proposed activity

Based on the expert review elaborated according to the provisions of § 36 of the Act, delivered standpoints and assessment of possible environmental impacts of proposed activity it is recommended to the permitting authority to condition the construction and

operation of proposed activity by fulfilment of the following conditions and to incorporate their solution in the documentation for the permitting proceeding:

- 1. To optimize the route of proposed power line in the section 4 the following way: The route of variant HR2 will be prolonged along the edge of forest unit Mikušová reaching over the ridge, where it will break and lead through permanent grass growth under the ridge from the side of valley Čierťaže. Before the partially built-up area used as settlements in Čierťaže valley the route will repeatedly move through the ridge and in the original break point it will connect to the original route of variant HR2.
- 2. To incorporate the route of corridor of proposed power line into ÚPN of VÚC Trenčín self governing region (concerning variant HV3 in section 1).
- 3. To incorporate the route of corridor of proposed power line into ÚPN of VÚC Banská Bystrica self governing region (concerning variant VP3 in section 2).
- 4. To incorporate the route of proposed power line into territorial planning documentations of particular affected municipalities.
- 5. To ensure the standpoints of respective regional monuments boards before the issue of building permit from the aspect of the interests of protection of archaeological discoveries (possible decision about the necessity to realize the archaeological research in the area of construction).
- 6. To ensure the elaboration of expert review assessing the presupposed level of electric and magnetic fields in relation to the fulfilment of requirements of hygienic limits according to the regulation of Ministry of Health of the SR no. 534/2007 Coll. on the Details of Requirements for Sources of Electromagnetic Radiation and for Limits of Exposition of Population Radiation in the Environment. To use the results of the expert review for local optimization of route of proposed power line and the height of towers near human dwellings within the project preparation for territorial proceeding.
- 7. For local optimization of route of proposed power line and the height of towers to minimize the impacts of proposed power line on typical forms and structures of scattered settlement ("štále"), the protection of which is solved in the regulations 5.12 and 5.13 in the sphere of area organization from the aspect of cultural heritage in the mandatory part of Territorial Plan of VÚC Banská Bystrica self governing region.
- 8. In the forest section of Radobická valley, where the line is proposed in the concurrence with the existing 2x110 kV line V7747/7747 along watercourse Cerová, to bring the proposed power line closer to the existing 2x110kV line V7747/7747 to the 35 m distance, simultaneously to raise the line towers as high as possible in the given section (circa 4 pcs) and to realize the felling for the needs of PZ only 5 m from the outside wire.
- 9. To specify the placement, type and height of every tower in the documentation for the territorial proceeding based on the
 - engineering-geologic research,
 - ecosozologic research consulted with ŠOP of the SR in the sections of proposed power line leading through CHKO Ponitrie, through all important biotopes according to the chapter C.III.7.2. of the Environmental Impact Statement, and areas of European importance and watercourses (in this case to consult also with the relevant authority of state water management and/or with the watercourse administrator).
- 10. The objects making wires of power line visible will be part of constructional-technical solution of proposed power line in the documentation for the zoning decision. Sections where they will be placed, the type of the objects and the distances between particular objects will be stated in cooperation with ŠOP of the SR.
- 11. Artificial nesting boxes for raptors on selected towers will be part of constructional-technical solution of proposed power line in the documentation for the zoning decision (protection against inappropriate nesting on proposed power line). The selection of

- towers, box types and placement on towers will be carried out in the cooperation with ŠOP of the SR. To prefer boxes in open landscape and nesting pads for owls within CHKO Ponitrie and in other forest areas.
- 12. If the facts stated in § 47 of the Act no. 543/2002 Coll. on Nature and Landscape Protection as amended will occur, to ensure the agreement for the tree felling according to the quoted provision. In the annex of application for agreement for the tree felling to calculate the social value of trees determined for felling according to the regulation of MoH of the SR no.24/2003 Coll. based on the elaborated dendrological research determining the social value of trees and to submit the proposal of substitutive plantation for the tree felling consulted with ŠOP of the SR, which will appropriately compensate the negative environmental impacts of proposed power line. To use only original and site appropriate trees for the substitutive plantation.
- 13. To ensure standpoints of respective district offices for road transport and roads and respective self governing regions in case of contact or intervention in the roads of II. and III. class.
- 14. The movement of construction machines to be realized only through existing access communications stated in advance. To use preferably the existing local, field and forest roads, the existence of which was verified by terrain research and in CHKO Ponitrie consulted with ŠOP of the SR. To keep these communications in good technical condition and not to extend them arbitrarily. To protect these communications with the temporary panel foundation on the places with high risk of erosion. The building of new access routes is possible only inside the corridor of PZ of line. In hardly accessible forest sections to realize the transport and construction work by built cableways or helicopter.
- 15. To secure the construction of proposed power line by mobile means for elimination of contamination of soils by oil substances in case of emergency situation. For this case to elaborate emergency plan in which besides other, the area/s for temporary placement of polluted soil will be defined.
- 16. To adapt the realization of particular work during the construction of proposed power line to weather conditions so that their environmental impacts would be minimized. Not to realize the crossing of transport and construction machines through unhardened communications and manipulation areas in the period when it is wet as a result of heavy precipitations. On the contrary, not to realize the terrain work during extremely dry and windy weather. To eliminate possible pollution of hardened communications by cleaning of wheels of vehicles before they enter them going from unhardened terrain. To immediately remove the possible pollution of these communications. In case of transport and storage of dusty materials to eliminate their blowing away by covering, in case of their necessary uncovering by regular sprinkling.
- 17. On agricultural soil to elaborate the balance and to realize the removal of overburden of humus horizon of permanently removed soil. To leave the excavation soil on the place and to use it immediately after the finish of construction of towers for backfilling and to spread the rest in the surroundings of a tower inside the PZ of proposed power line. Not to fill with that the terrain depressions and similar places around the building sites. Immediately afterwards to realize the technical and biologic reclamation. To remove only highly growing trees, to remove low growing trees only to the extent necessary for wire drawing.
- 18. To realize the removal of overburden of humus horizon of permanently removed soil on forest lands. To leave the excavation soil on the place and to use it immediately after the finish of construction of towers for backfilling and to spread the rest in the surroundings of a tower inside the PZ of proposed power line. Not to fill with that the terrain depressions and similar places around the building sites. Immediately afterwards to realize the technical and biologic reclamation. To place possible store of material, or temporary construction yard outside the forest lands. Not to affect the surrounding forest

lands during the construction of proposed power line. If the PZ of proposed power line is not left to natural succession, in one year from the finish of construction of relevant section to forest it according to in advance elaborated and approved project. To take care for planted seedlings minimally for five year period. To take into account the original species composition of growths for species composition of substitutive planting. To take into account the fact that in protective forests the interventions causing the uncovering of bigger area are excluded (over the width equal to one height of renewed growth). In the sections where the proposed power line will create big overhangs over individual valleys, to minimize the tree felling only to central area of route for wire drawing.

- 19. To technically and technologically prevent the intervention in the growth of protective forest no. 3329 and 1243 and to minimize the intervention in the growth of protective forest no. 1250 (e.g. by use of § 43 of par. 5 of the Act no. 251/2012 on Energetics preservation of forest in the distance of 5 m from outside line wires).
- 20. To plan the construction work in the surroundings of watercourses out of the period of high water level. If possible, to eliminate the crossing of transport and construction machines through watercourses, or to minimize their impacts using the temporary bridges or fords hardened by temporarily laid panels. To place towers from watercourses as far as possible. To minimize the felling of bank growths in PZ of proposed power line only to the highest trees, or to necessary width for wire drawing. In case of need of hardening of banks after the finish of construction around the watercourse, to use the hardening by vegetation adjustments.
- 21. To realize the felling only from September to the end of March. To conduct expert research of trees determined for the felling before the realization of felling from the aspect of possible occurrence of animals threatened by felling (e.g. animals using tree hollows). In case of positive discoveries to conduct remediation measures.
- 22. To minimize the construction work in forest complexes in spring season of animal reproduction and leading out of young animals.
- 23. To secure particular elements of construction (construction holes, material, machines) so that they would not cause death or injury of animals.
- 24. To realize construction and excavation work near or inside wetland biotopes only in the period of drought or freeze. Movement of machines on wet and soaked areas is prohibited.
- 25. In case of need during construction in SKUEV0013 Stráž and SKUEV1013 Stráž to temporarily cover the vegetation cover by panel blocks for machine movement and immediately after the finish of construction work to ensure grassing over of disturbed areas on sites by suitable species with the following management.
- 26. To ensure environmental supervision of construction by professionally qualified person communicating with ŠOP of the SR or environmental supervision of construction by workers of ŠOP of the SR.

4. Substantiation of Final Record including substantiation of accepting or not accepting the submitted written standpoints to the Environmental Impact Statement

Substantiation of accepting or not accepting the written standpoints Individual comments are shown in *italics*.

Ministry of Agriculture and Rural Development of the SR

• while in case of part of line route marked as "HV", the forest land principles following from § 5 of the Act no. 326/2005 Coll. on Forests as amended were adhered, by proposal of optimal route in the "HV2" variant, on the contrary, the line route in the locality marked as "HR2" violates the subjective principles of forest land protection by the proposal of route through the forest lands. Within the assessment and determination of rate of "weights" they consider as irrelevant the reduction of "assessment weight" for occupations of forest lands protected by law and as unjustified the increase of "weights" for respecting the municipalities' requirements. They consider impact of electromagnetic radiation as a limiting element for the impact on population, which (according to the text stated in the Environmental Impact Statement) can be regulated by the type and height of power towers.

In further process they require to respect basic principles of forest land protection given by § 5 of quoted Act on Forests and in further process, possibly yet before the issue of Final Record within the impact assessment process, to realize the separate consultation with the proponent of the Preliminary Environmental Study, elaborator of the Preliminary Environmental Study, municipality representatives, forest managers and with attendance of respective authority of forest management state administration (District Forest Office in Žarnovica) to repeatedly assess the proposed variants "HR1" and "HR2" and to give reasons for the social necessity of placement of proposed activity on forest lands. The substantiation of social necessity follows from § 5 par. 1 of quoted Act on Forests.

The recommended variants in section 1 and in section 4 were consulted with the representative of Ministry of Agriculture and Rural Development of the SR on 04/19/2013. He did not have objections to variant HV3 and variant HR2 was recommended after the fulfilment of their condition – consultation with the affected authority of forest management. Based on this consultation the route of variant HR2 was optimized, which was projected into 1st condition of chapter VI/3 of Final Record.

 Conditions stated in the standpoint of Ministry of Agriculture and Rural Development of the Slovak Republic no. 2123/2012-720 date 06/12/2012 to the "Preliminary Environmental Study" for given activity remain in force and they require to incorporate them into the conditions of Final Record.

The relevant conditions were incorporated in the chapter VI/3 of Final Record.

Ministry of Environment of the Slovak Republic, Department of State Administration

• recommends to realize the route 1 of proposed power line, which they consider as more convenient than the route 2 with minimal difference.

The realization of route 2 of proposed power line is recommended. Detailed substantiation is stated in the parts "Assessment of particular variants and selection of optimal variant in the section 1", "Assessment of particular variants and selection of optimal variant in the section 2" and "Assessment of particular variants and selection of optimal variant in the section 4" of chapter IV of Final Record.

 With respect to that the whole route of proposed activity is important gene pool area for birds and in several parts it crosses the migration routes of birds, they require placing the quality objects making DS visible on proposed power line.

Accepted in the form of 10th condition of chapter VI/3 of Final Record. municipality Oslany

• Variant HV2 is not in conflict with the built-up area of municipality, but it would negatively impact its development plans. In the Buclovné locality right before the crossing of Osliansky brook it leads over motocross area, where the area of polyfunctional building is located, designated also for housing. By transit from road II/512 to Sítenie locality it leads through the area defined in the valid territorial plan of municipality as the industrial park. For this reason this variant is unacceptable for the municipality. Municipality Oslany recommends HV3 variant after the agreement with the participating municipalities. They do not expect negative impact of this variant on the environment or on life quality and health of population.

Accepted. Detailed substantiation is stated in the part "Assessment of particular variants and selection of optimal variant in the section 1" of chapter IV of Final Record. municipality Radobica

• Definitely rejects HV1 variant of the section 1.

Accepted. Detailed substantiation is stated in the part "Assessment of particular variants and selection of optimal variant in the section 1" of chapter IV of Final Record.

• They consider the remaining two variants of this section (HV2 a HV3) as more suitable, despite that they consider them as unsuitable in the part Radobica – Cerová and Banské from the aspect of municipality. They state that Cerová and Banské were very sought-after tourist and recreational part of municipality and the construction and operation of proposed power line would significantly reduce the value of this cottage area. They think that the authors of the Environmental Impact Statement overestimate the negative impacts on nature and underestimate possible impacts on life quality and health of population. They require diverting the routes HV2 and HV3 more distant from dwellings so that it would bypass the built-up area and the specific character of scattered area would be preserved. They recommend to place the route of power line in the forest growths and to cover them from the view of inhabited objects.

Not accepted. Detailed substantiation is stated in the part "Assessment of particular variants and selection of optimal variant in the section 1" of chapter IV of Final Record. municipality Veľké Pole

• Municipality and citizens of municipality in the separate standpoint prefer the variant VP3 and also state the reasons of this preference.

Accepted. Detailed substantiation is stated in the part "Assessment of particular variants and selection of optimal variant in the section 2" of chapter IV of Final Record. municipality Hrabičov

 Supports HR2 variant. They state that HR1 variant is in conflict with development plans of municipality and it would bring a lot of negatives during the construction and operation of proposed power line.

Accepted. Detailed substantiation is stated in the part "Assessment of particular variants and selection of optimal variant in the section 4" of chapter IV of Final Record.

Public Health Authority of the SR

They state that it is necessary to submit the expert study within the project documentation
for territorial proceeding, which assesses the presupposed level of electric and magnetic
fields in relation to the fulfilment of requirements of the regulation of Ministry of Health of
the SR no. 534/2007 Coll. on the Details of Requirements for Sources of Electromagnetic
Radiation and for Limits of Exposition of Population Radiation in the Environment.

The requirement for elaboration of such expert study is the subject of 6th condition of chapter VI/3 of Final Record.

District Environmental Office Trenčín

 They prefer HV2 variant provided that the placement of towers in riparian growth of brook Cerová will be conducted based on the realization project considering the most preserved parts of priority biotope of European importance 91E0 Alluvial forests with Alnus glutinosa and Fraxinus excelsior.

Not accepted. Detailed substantiation is stated in the part "Assessment of particular variants and selection of optimal variant in the section 1" of chapter IV of Final Record.

• They consider as necessary to follow all technical measures during the construction (mainly in points 31 – 67) stated in the Environmental Impact Statement.

The objection was taken into account in the chapter VI/3 of Final Record.

District Environmental Office Banská Bystrica

• Points out the confusion of areas of European importance SKUEV0013 Stráž and SKUEV1013 Stráž on p. 250 in the Environmental Impact Statement. SKUEV0013 Stráž is located in the cadastral area Veľké Pole on the area of 19.882 ha, SKUEV1013 Stráž is the part of consulted supplement of national list of areas of European importance and it is in the cadastral area Veľké Pole on the area of 329.04 ha. The route of power line reaches in the cadastral area Veľké Pole the edge of SKUEV0013 Stráž by short sections of variants VP1, VP2 (60 m) and VP3 (860 m) and the SKUEV1013 Stráž by variants VP1 (1 550 m), VP2 (1 800 m) and VP3 (860 m).

Accepted, except for the length of route of variant VP3 through SKUEV0013 Stráž stated in the standpoint. Based on the analysis of map documents, the length of 96 m seems to be

more probable than 860 m. The objection was taken into account in the chapter V of Final Record.

• They require consulting preliminarily the exact location of towers of proposed power line in the area of European importance SKUEV0013 and SKUEV1013 with the Administration of CHKO Ponitrie due to elimination or minimization of liquidation of protected and endangered species by building of concrete foundations of towers latest to the date of zoning decision issue.

Accepted. The requirement is taken into account in 9th condition of chapter VI/3 of Final Record.

<u>District Environmental Office Prievidza</u>

 The section of nature and landscape protection requires the consistent fulfilment of measures proposed for prevention, elimination, minimization and compensation of impacts of proposed activity stated in the Environmental Impact Statement to protect agricultural soil, forest soil, landscape and protected areas, fauna, vegetation and biotopes.

The comment was taken into account in the chapter VI/3 of Final Record.

 The state section of water management states that the route of HV1 variant runs through the PZ of II. degree of waterworks sources HGB-1 HHV-1 in the cadastral area Horná Ves and they require the fulfilment of measure for the protection of waterworks sources according to the decisions on their designation and provisions of regulation of MoE of the SR no. 29/2005 Coll.

Variant HV1 is not recommended.

• The state section of air protection of the branch office Partizánske considers as necessary, with respect to the manipulation with dusty materials, that the assessment of extent of measures is based on meteorological conditions and the surroundings conditions.

The comment was taken into account in the 16th condition of chapter VI/3 of Final Record.

• The section of nature and landscape protection of the branch office Partizánske requires fulfilment of several measures (they enumerate them), which are considered also in the Environmental Impact Statement.

The comment was taken into account in the chapter VI/3 of Final Record.

 They require before the issue of zoning decision (within the scope of district Partizánske) to select and incorporate the sections of proposed power line into the project documentation, where the objects making DS visible will be installed on wires.

Accepted in the form of 10th condition of the chapter VI/3 of Final Record.

• Further, they require before the issue of zoning decision (within the scope of district Partizánske) to make an inventory of trees growing outside the forest, to calculate their social value and to incorporate the data into the project documentation.

The comment was taken into account in 12th condition of the chapter VI/3 of Final Record. District Environmental Office Banská Štiavnica

• As the competent authority of state water management agrees with the realization of Preliminary Environmental Study under the following conditions "In the realization of activity to proceed according to the provisions of the Act no. 364/2004 Coll. (Act on Water) as amended and to pay attention to that the water management interests are not violated" and "By possible manipulation with dangerous substances during the realization of liquidation of loading ramp the applicant is obliged to follow the provisions of § 39 of the Act no. 364/2004 Coll. (Act on Water) as amended and to do necessary measures to prevent the getting of these substances into surface and ground waters and so threaten their quality."

The stated obligations follow from the generally mandatory legal regulation.

 They consider as necessary to consult preliminarily the exact location of towers of proposed power line in the area of European importance SKUEV0013 and SKUEV1013 with the Administration of CHKO Ponitrie due to elimination or minimization of liquidation of protected and endangered species by building of concrete foundations of towers latest to the date of zoning decision issue.

Accepted. The requirement was taken into account in the 9th condition of chapter VI/3 of Final Record.

• They consider the proposed line route from the aspect of interest of nature protection as acceptable, they consider HR1 variant as more appropriate than HR2 variant. They recommend VP3 variant in the section 2. They incline to the HR1 variant in the section 4.

Accepted in the section 2, not accepted in the section 4. Detailed substantiation is stated in the parts "Assessment of particular variants and selection of optimal variant in the section 2" and "Assessment of particular variants and selection of optimal variant in the section 4" of chapter IV of Final Record.

 They consider as necessary to adopt all measures for mitigation of environmental impacts stated in the Environmental Impact Statement to further phases of documentation for territorial and building proceeding (it is stated which ones should be regarded).

The comment was taken into account in the chapter VI/3 of Final Record.

 As the competent authority of the state section of water management agrees with the Environmental Impact Statement under the conditions "To respect bank lands of watercourses in the given locality." and "For the construction project for the zoning decision, the standpoint of authority of state water management according to § 28 of the Act on Water is necessary."

The requirement "To respect bank lands of watercourses in the given locality." is taken into account in the 9th and 20th condition of chapter VI/3 of Final Record. The necessity of the standpoint of authority of state water management follows from the generally mandatory legal regulation.

<u>District Lands Office Banská Bystrica</u>

 They require respecting consistently the measures proposed for prevention, elimination, minimization and compensation of environmental impacts of proposed activity, mainly in relation to possible erosion, compaction and contamination of affected agricultural soil.

The comment was taken into account in the chapter VI/3 of Final Record.

<u>District Forest Office Trenčín</u>

 Agrees with the realization of submitted Preliminary Environmental Study - HV2 variant on forest lands.

Variant HV3 is recommended. Detailed substantiation is stated in the part "Assessment of particular variants and selection of optimal variant in the section 1" of chapter IV of Final Record.

District Forest Office Banská Bystrica

• States that the proponent further suggests the use of route of dismantled power line and ignores the fact that by dismantling of line the linear construction as such was liquidated and by that the restriction of use of affected forest lands was liquidated. So the authorities of the state administration of forest management can not respect the data stated in the table 52 (p. 256 in the Environmental Impact Statement), which do not respect the current condition and therefore they are misleading. With respect to that they do not agree with the selection and the reasoning of proposal of optimal variant. With respect to the forest land protection they consider as optimal routing in the area of Banská Bystrica region in the variant of VP1-1Z-HR1-1V.

Not accepted. Detailed substantiation is stated in the parts "Assessment of particular variants and selection of optimal variant in the section 2" and "Assessment of particular variants and selection of optimal variant in the section 4" of chapter IV of Final Record.

District Forest Office Prievidza

Requires in compliance with § 36 of the Act to assess the impact of proposed activity
according to variants HV1, HV2 and HV3 from the aspect of the amount of loss of nonproductive functions of forests (of value of effects of non-productive functions of forests
according to the management complexes of forest types), temporary excluding the forest

lands from the fulfilment of forest functions, and from the aspect of the amount of compensation for the restriction of proprietary rights (§ 35 par. 4 letter a) of the Act on Forests), which belongs to the owners of forest lands according to § 35 par. 1 of the Act on Forests.

The stated obligations follow from the generally mandatory legal regulation. They are irrelevant for HV1 and HV2 variants in case of acceptance of recommended variant HV3. District Forest Office Žarnovica

 Within their territorial scope they propose the route VP3-1z-HR1-1v. By the realization of this route the smallest area of forest lands will be used and the smallest disturbance of interests of forest management will occur.

In the section 4 the route of proposed power line is not accepted. Detailed substantiation is stated in the parts "Assessment of particular variants and selection of optimal variant in the section 2" and "Assessment of particular variants and selection of optimal variant in the section 4" of chapter IV of Final Record.

<u>District Office of Road Transport and Roads Trenčín</u>

• The constructor will ensure that during realization no damage or pollution of road land of the road I/64 will occur.

Taken into account in the 16th condition of the chapter VI/3 of Final Record.

• The standpoint to the contact with the road II/512 and III/5121 for MoE of the SR will be issued by District Office of Road Transport and Roads Prievidza.

Accepted in the form of 13th condition of chapter VI/3 of Final Record.

<u>District Mining Office Banská Bystrica</u>

• They recommend realization of the VP3 route in the stated locality because of the mining activity conducted in the quarry Veľké Pole and related bursting work.

Accepted. Detailed substantiation is stated in the part "Assessment of particular variants and selection of optimal variant in the section 2" of chapter IV of Final Record.

Regional Monuments Board Trenčín

Confirms the validity of condition of mandatory standpoint no. TN-2012/00727-02/Dvo date 05/21/2012, which is that the proponent shall obtain the statement of Regional Monuments Board Trenčín branch office Prievidza from the aspect of archaeological discoveries in advance before the issue of building permit (decision about the necessity to realize the archaeological research in the area of construction).

Accepted in the form of 5th condition of chapter VI/3 of Final Record.

Trenčín self governing region

• States that HV1 variant is in compliance with the Amendments and addendum no.2 of ÚPN (Territorial Planning) of VÚC Trenčín self governing region. In case of another variant it is necessary to incorporate this (different) variant into the respective territorial planning documentations.

Accepted in the form of 2nd and 4th condition of chapter VI/3 of Final Record.

Banská Bystrica self governing region

 Considers as necessary to ensure the minimization of interventions in the area with typical forms and structures of scattered settlement ("štále") during construction, because its protection is solved in the regulations 5.12 and 5.13 in the sphere of area organization from the aspect of cultural heritage in the mandatory part of Territorial Plan of VÚC Banská Bystrica self governing region.

The comment was taken into account in 7th condition of chapter VI/3 of Final Record.

• They consider the VP3 variant as the most suitable in the section 2 and the HR2 variant in the section 4.

Accepted. Detailed substantiation is stated in the parts "Assessment of particular variants and selection of optimal variant in the section 2" and "Assessment of particular variants and selection of optimal variant in the section 4" of chapter IV of Final Record.

• It is necessary to apply for the standpoint of Banská Bystrica self governing region, Department of Road Infrastructure when affecting the II. and III. class.

Accepted in the form of 13th condition of chapter VI/3 of Final Record.

Substantiation of Final Record

The Final Record was elaborated based on the Environmental Impact Assessment process of proposed activity according to the Act. Source materials for its elaboration were the Environmental Impact Statement, Expert Review, the Scoping of Assessment of proposed activity, standpoints of participants in the assessment process to the Environmental Impact Statement, some standpoints of participants in the assessment process to the Preliminary Environmental Study, minutes from public consultations of proposed activity, minutes from the consultations in MoE of the SR before the issue of Final Record, minutes from consultations of proponent with municipality Hrabičov and District Forest Office Žarnovica, and also correspondence of MoE of the SR, which is the information source about the progress of assessment. Further the information from the Internet were used (satellite pictures of affected area, web sites of ŠOP of the SR, municipalities and alike) and personal knowledge of elaborator of Final Record.

In total 36 standpoints were submitted to the Environmental Impact Statement. Further, 3 minutes of public consultations of proposed activity were submitted to MoE of the SR. Different preferences of variants follow from stated standpoints. The problem of variants was analyzed in detail in parts "Assessment of particular variants and selection of optimal variant in the section 1", "Assessment of particular variants and selection of optimal variant in the section 2" and "Assessment of particular variants and selection of optimal variant in the section 4" of chapter IV of Final Record. Based on that, the variant was recommended in the chapter VI/2 of Final Record.

Also, different requirements, proposals and recommendations follow from stated standpoints, which MoE of the SR took into account in the elaboration of Final Record (more details in previous part if this chapter).

MoE of the SR also inspected all possibilities for prevention, elimination, minimization and compensation of negative environmental impacts of proposed activity and conditioned their Final Record by realization of real and effective measures stated in the chapter VI/3 of Final Record.

5. Required extent of after-project analysis

- The random check (or based on possible complaints) of fulfilment of conditions of building permit stated due to the minimization of negative impacts during construction of proposed activity.
- The regular check of technical condition of transport and construction machines aimed mainly at the prevention of pollution of rocky environment, ground and surface waters, excessive emissions of substances polluting air and excessive noise.
- Check of fulfilment of conditions of building permit (including measures for prevention, elimination, minimization and compensation of negative impacts) within the process of approval of construction.
- Based on the consultations with ŠOP of the SR to elaborate the program of monitoring of selected components of animate and inanimate nature. To start the monitoring before the construction of proposed power line and to continue with that during its construction and during its operation.

Based on the operative evaluation of results of monitoring according to § 36, par. 3 of the Act on Assessment, in case that it is found out that the actual impacts of proposed activities assessed according to this Act are worse than it is stated in the Preliminary Environmental Study, the proponent is obliged to ensure the measures for harmonization of actual impact with the impact stated in the Preliminary Environmental Study and in compliance with the conditions stated in the decision on the permit of proposed activity according to the special regulations. The permitting authority should inform the proponent about this responsibility within these conditions.

6. Information for the permitting authority about the participating public

The participating public is according to § 24 of the Act the public which is or might be interested in the procedure of environmental decision making. A natural person according to § 24a of the Act, legal person according to § 24b or § 27 of the Act, civic initiative according to § 25 of the Act and civic organizations supporting the environmental protection according to § 26 of the Act belong among the participating public. In the process of assessment of impacts of proposed activity "Line 2x400 kV Bystričany locality – Horná Ždaňa" the following participating public was identified:

Micro-region Medzihorie, Horná Ves 191, 972 48 Horná Ves

The participating public has according to § 27a of the Act the right of active participation in the preparation and permitting of proposed activity through the whole process of impact assessment until the issue of proposed activity permit and in case of fulfilment of conditions stated in § 24a to § 27 of the Act also the right for participation in the following permitting proceeding. Conditions stated in § 24a to § 27 of the Act does not fulfil any of participating public.

VII. CONFIRMATION OF DATA CORRECTNESS

1. Elaborators of Final Record

Ministry of Environment of the SR Department of Environmental Assessment Mgr. Andrej Kučeravý in cooperation with

Public Health Authority of the SR

2. Confirmation of data correctness by authorized representative of respective authority

RNDr. Gabriel Nižňanský Director of Department of Environmental Assessment Ministry of Environment of the SR

3. Place and date of issue of Final Record

Bratislava 06/05/2013