

Most significant impacts of the proposed motorway D1 Turany - Hubová on the Rojkovské Rašelinisko Mire

(Preliminary report)

The Rojkor mire - the oldest active mire in Slovakia and an ecological jewel of central Europe has been disrupted by the construction of the controversial surface – tunnel variant of the D1 Turany – Hubová. This precious mire has existed for 15 000 years, but it is questionable if it will survive the next few months.

On Saturday, 24th April 2010 around 8:30 am, a group of 4 – 5 people were noticed at the northwest side of the Rojkor Rašelinisko Mire Nature Reserve, who were digging a trench - 1m deep and approx. 0.4m wide leading from the turn-off of the service road of the prepared western portal of the Rojkor highway tunnel parallel with the main road E50, at a distance of 6 - 8 m from the northern border of Rojkor Rašelinisko Mire Nature Reserve (Pict.1) and close to the village of Rojkor (Ružomberok district).

At the time of the detection of this event, the construction workers had advanced half way along the northern boundary of the nature reserve and their planned further routing clearly seen due to the soil dig offs and bush debris in a belt approx. 4 - 6 m wide (Pict. 2).

We estimate that 40% of bushes, predominantly of habitat of national importance - Kr8 - willow shrubs of natural dystrophic lakes (Pict. 3) were cut. Based on the amount of work done at that time, it seemed that the digging works had begun already one day before, i.e. on 23rd April 2010.



Pict. 1 Dig off of the trench for relocating a cable, draining the northwest part of the Rojkor Rašelinisko Mire Nature Reserve (view to the west, 24th April 2010)



Pict. 2 Shrub debris, sod removal and the planned extension of the digging route of the trench along the northern border of Rojkovské Rašelinisko Mire Nature Reserve (view to the east, 24th April 2010)



Pict 3 Interference in the habitats of national importance Kr8 willow shrubs of dystrophic lakes during the digging of the trench

This finding was brought to the attention of the State Nature Conservancy of the Slovak Republic (Veľká Fatra National Park Committee in Vrútky) and on Monday 26th April 2010 to the Slovak Inspection of the Environment (SIE) in Žilina and to the Director of Unit B, Nature, DG Environment in Brussels, RNDr. Ladislav Miko, CSc. The inspection accepted our initiative and started with an investigation on Wed. 28th April 2010, when a site visit was carried out. On Monday, the subcontractor working for the construction company Doprastav Ltd. Bratislava, had stopped with the digging works, even though on Wednesday two geodesists of Doprastav and inspectors of the SIE declared that the works were in accordance with the construction permit.

The geodesists supported this claim with a detailed map from the project documentation of the D1, where this trench for relocation of cable was drawn, but neither the construction permit or the decision of the relevant regional environmental office have been shown.

After the incident had been publicised in the media (press release of SOS/BirdLife Slovakia, Foe-CEPA and Botanical garden UK, Markíza Television, Sme Newspaper) the Ministry of Environment with the EC could not avoid reacting. This unfinished trench **was filled in again** in a rush, presumably already on Friday 30th April 2010 **without shifting this cable** (on Saturday 1st May 2010 the trench was filled as on Pict.4). **This seems to indicate that the works were after all found not to be in accordance with the construction permit.**



Pict. 4 Filled in trench along the northern border of Rojkovské mire (1st May 2010)

The first critical point for the further status of the Rojkovské mire is that the digging, although physically out of the reserve, **had been draining the water out of the reserve for the whole week**. At the time of detecting this problem, the water was draining at a speed of 1 - 2 l.s⁻¹, and later on at approx. 0.5 - 1 l.s⁻¹, which means that between Friday

23rd April and 30th April 2010, several hundreds of m³ water had escaped through this trench (very rough estimation 400 - 800 m³).

This resulted in a decrease of groundwater levels in the northwest alluvial part of the mire of approximately 9 -10 cm, which **could mean significant unfavourable interference in the integration of habitats in this, the most sensitive phase of the life cycle** (patchy drying of upper part of mire horizon and changes in the eco phase from hydric to littoral or on limose, instability of groundwater levels, risk of increased mineralization of organic substances and disruption of mire process and other original soil processes) and viability of precious and endangered plants and animals, mainly the shallow rooted, smaller, competitively weaker and successively earlier plants and less active water and epigeic invertebrates.

Out of the habitats of the European importance this includes especially Ra6 (Rich fens, including eutrophic tall-herb fens and calcareous flushes and soak), also Lk5 (Hygrophilous tall-herb fringe communities of plains and of montane to alpine belts), Ra3 (Transition mires and quaking bogs), Vo3 (Natural dystrophic lakes and ponds) and priority habitat Ls7.1 (Bog woodland).

Lest attempts should be made to downplay the unfavourable impacts of this digging by mentioning the nearby ditch by the E50 road, then it must be said that its drainage effect is incomparable as it is disconnected at various points (its hardly drains the water away) and its base is located approx. about 0.4 - 0.6 m higher than the bottom of this trench.

A crucial aspect of this is the fact that the authors of the study "The assessment of importance of impacts of the proposed motorway D1 Turany - Hubová on Natura 2000 sites" by PEŤKOVÁ & MIKA 2007 under Creative, spol. s r. o. Pezinok) **did not mention the presence of habitats Ra3, Vo3 and Ls7.1 in Rojkovské Rašelinisko Mire Nature Reserve** – as well as not mentioning 3 out of 5 destroyed habitats of European importance on the D1 route in the Malá Fatra Special Area of Conservation (SAC), about 2 out of 3 destroyed habitats of European importance in the routing of Veľká Fatra SAC, about 3 out of 6 destroyed habitats of European importance in the routing at the River Váh SAC etc. This strongly indicates and reflects **substantial unprofessionalism and inadequacy in their assessment** (more info TOPERCER et al. 2009, <http://www.priateliazem.sk/cepa/index.php?id=142&level=1&x=3229>).

A similar extent of unprofessionalism and bias can be seen in the decisions of **the State Nature Conservation Agency** (ŠOP SR) in Banska Bystrica and the Ministry of Environment SR in Bratislava (mainly the position from the 10th December 2007 č. 12025/2007-3).

It is crucial to point out that in addition to the habitats listed, on this less than 3 ha territory of Nature Reserve (2.88 ha) the oldest living mire in Slovakia (age approx. 15 000 years HORSÁK 2003) is a unique place showing a conjunction of transitional mire and raised bog habitats with an exceptional density of plant diversity (17 types of plant communities and 160 types of higher plant - KLIKA 1934; BOSÁČKOVÁ 1965, 1967; HÁBEROVÁ a FAJMONOVÁ 1995). Many of those are located only on this territory - Veľká Fatra SAC (*Carex diandra*, *Drosera rotundifolia*, *Ledum palustre*, *Stellaria palustris*, *Trichophorum pumilum*, *Triglochin maritima*), or are primarily numerous populations (*Gymnadenia densiflora*, *Menyanthes trifoliata*, *Pinguicula vulgaris*, *Salix rosmarinifolia*) or have other significance (*Carex viridula* a *C. dioica*, conspicuous glacial relict - KLIMENT a kol. 2008).

Of the numerous precious animals, the habitat represents a viable population of European importance of *Vertigo angustior*

A second and more significant critical point for the mire is the **Rojkov highway tunnel**, particularly its tube and western portal. The tunnel is supposed to be built only approx. 80 m southwest from the border of the reserve, 10 - 17 m high, under sloped sediments (which are inclined to slope deformations. A large amount of ground waters of shallow circulation filter in from them to the mire).

The construction area of the portal finishes **only 20 m from the reserve boundary** and the tunnel tube would cross the micro basin of the mire.

Such **major interference into the water sources and the basin of the mire would without question mean existential danger** for it. The study of PEŤKOVA & MIKA (2007) downplays its significance by referring to mitigation measures (protective waterproof fence, insulation of the tube walls of the Rojkov tunnel), which, without the fact that they have dubious effectiveness, were also not mentioned either in the documentation for the construction permit or in the construction permit itself. Under such circumstances, threats to the oldest living Slovak mire are **not only taking place, but are escalating**.

The fact that a large and complicated construction will be constructed only a few metres from the mire, according to such an unsatisfactory construction permit and with chaotic implementation - as already been seen by the digging of the trench - **gives reason to suspect that other similar problems will arise**. For a small mire these, or cumulative effects, may be fatal.

The mentioned risks are apparently underestimated not only by the Slovak state organs, but also by the EBRD (which has approved financing for the project in spite of the weaknesses in the biodiversity assessment) and also the European Commission. The EC has been concerned with the mitigation measures of the approved variant for several months but is **omitting the problem that the study by PEŤKOVA & MIKA (2007) is not an appropriate assessment of the variants of D1 under the Article 6(3) Habitat Directive**.

Solid arguments put forward in three independent specialists' opinions (TOPERCER et al 2009, VOLF 2010 and 1 unpublished study) have not been appropriately considered by them.

Two general conclusions:

1. The currently planned route of highway construction for the D1 will cause an enormous increase of public debt (which is, however, **reversible**), but also, notoriously ignored by economists, an **inappropriate increase of the environmental debt**, including various **irreversible** items such as the devaluation of the unique Rojkovské mire, which cannot be substituted or reconstructed.
2. The most expensive highways are not those, which will not be built. The most expensive highways are those, which are built **in a hurry**, are politicized, are not transparent and are harmful to nature and to the local people. The construction of the D1 motorway, Turany - Hubová is such an example.

Blatnica, 4th May 2010

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