

C.IX. Non-technical summary

The documentation on the environmental impact assessment of the road construction I/48 Rychaltice - Frýdek-Místek in the range and object composition as it is stated in the elaborated documentation for the planning decision (Dopravni stavby projekce Ltd., Olomouc, 2002).

The following impacts were mainly evaluated as significant in terms of the environmental impacts:

Soil

The construction would demand a total appropriation of land of ca 40 ha. Its precise enumeration and division to appropriation according to types of plots would have to be executed in further stages of project documentation after the choice of the final construction solution conception and vertical and horizontal stabilization of the route and related roads.

Surface waters

The construction overcomes small watercourses, which are bridged by bridge objects, which are dimensioned for hundred-year water according to pertaining technical regulations. The background documentation does not include any further specific water management solution of the construction, which would have to be supplemented in further stages of project documentation. Own protection of surface waters against pollution caused by outwash from the road surface can be ensured in the assessed road section by standard measures, which are used by the newly constructed roads of comparable category.

Underground waters

The current hydro-geological situation in the interest area were not detected in the necessary range in terms of the preliminary geo-technical survey (mainly with regard to the planned construction of the trenched tunnel), it was not possible to evaluate in a complex way the expected impacts of the construction on the underground waters and water sources in the immediate vicinity of the construction in the current phase of territory inspection. Therefore there is a requirement for supplementing, event. Providing details about the geo-technical survey with the main focus on the expected impacts identified in the documentation in terms of the proposed measures.

Geological factors

It would be also necessary to execute the survey of potential problems in the area of trenched tunnel construction mainly from the point of view of ensuring potential breakdowns of cut parts (frosting and slaking of slopes and their subsequent slides, inrush of underground water, etc.) in terms of supplementing the geo-technical survey (from the above mentioned reasons). The detailed evaluation and elimination of these potential problems can backwards influence the range of appropriation of land and soil balance (e.g. by the choice of different gradients of cuts and fills slopes). All these problems can be solved by standard construction-technical measures.

Noise

The noise assessment was executed based on data on traffic intensities and their prospective trends from the year 1995. It can be expected in terms of the prospective noise situation that the noise load in the vicinity of the road (i.e. within 100 m of the road protective zone) would be in the range 40-50dB (A) in the night time and 50-60 dB (A) in the day time, mainly however within the lower boundary of this range during the construction of anti-noise measures in the road's passage area through the housing development of the municipality Rychaltice and Chlebovice and in the road's passage area between the Lysůvky and Zelinkovice housing development. The equivalent noise level in the rural areas will not exceed the noise level of 5 dB (A) in the night time and 60 dB (A) in the day time after realization of the anti-noise measures. Therefore any significant negative impacts of the traffic noise on the health of the inhabitants on the assessed road are not expected.

Air

Any changes in the local climate cannot be expected in relation to the construction and operation on the assessed road section I/48.

The realized construction would contribute to the average annual emission concentrations of nitrogen oxides by ca. max. 25% of the admissible limit in the areas of FOJ at km 18.862 (BW 104). In other territory along the route of the future road I/48 then max. ca. 20% of the admissible limit ($80 \mu\text{g}\cdot\text{m}^{-3}$).

Short-term NO_x emission concentrations are currently in the vicinity of current road route I/48 exceeded in parts of the housing development Rychaltice and in the central part of Frýdek-Místek. In local parts of Frýdek-Místek, i.e. Zelinkovice, Lysůvky and Chlebovice reach approximately half values of admissible limits ($200 \mu\text{g}\cdot\text{m}^{-3}$). The decrease of average short-term emission concentrations NO_x as a consequence of the expected decrease in the production emissions from the vehicle operation (modernization of vehicle fleet and changes in the traffic flow composition) can be expected in the year 2005.

However the traffic emission impacts will transfer to the area of the new road route I/48 caused by the construction of the assessed road section I/48 - see the map annex no. 3.

Deterioration in the emission situation compared to the current state would occur in the passage area between the family houses in Chlebovice (left no. 20, right without land-registry numbers), where short-term emission concentrations of nitrogen oxides will be in average ca 100 hours per year exceed the allowed limit $200 \text{ u.g}\cdot\text{m}^{-3}$, i.e. almost 25% of the allowed time limit, which is 468 hours/year.

In terms of these collisions, the road passage through the northern hook of the supra-regional bio-centre Hukvaldy was evaluated as significant. The construction leads in this section in the route of the current road, however there will be the construction intervention also into boundary parts of forest due to the number of lanes, construction of accompanying road, fly-over connection of Krnalovice and connection of a roadhouse. The migration aggravation, dispersion and mutual contacts of individual species in the direction north - south would be caused by the construction of the new route (it has in this section rather a reconstruction character of the current route to the four-lane road and enlargement of the necessary corridor for transferring the road and related roads across the bio-centre). The current construction's technical solution enables animal migration in the crossing places of watercourses (the Krnalovický and Košice brook). The construction solution would have to be supplemented by screens, which would limit the access of animals on the road.

Traffic

The own conception solves also the movement of vehicles in the territory, which would not have the access to the expressway, or which would in future avoid using the expressway I/48, because of fees, through the accompanying road leading along the northern side of the reconstructed route I/48 up to the place, where the new R48 route diverges from the original route.

C.X. Conclusion

The proposed environmental impact assessment of the expressway construction I/48 - in the section Rychaltice - Frýdek-Místek is elaborated by course of law no. 244/1992 Coll., on the environmental impact assessment. The evaluation comes from the updated technical solution, in which the comments to the insufficiencies of the previous DTD documentation are taken into consideration, which were critically evaluated in the EIA documentation elaborated by the company ENVIROAD Ltd. in the year 2000.

The expected impacts of the solved road sections correspond with the common impacts of line constructions on their environment. This entails mainly the load of local inhabitants and ecosystems by noise and emissions, during the construction as well as during the operation on the given road. Among the most burdened localities belong the housing developments of Chlebovice, Zelinkovice and Lysůvky. A tunnel with the length of 160 m is proposed in the R48 route in order to decrease the load of inhabitants by impacts of the operation on the proposed expressway.

The passage of the proposed route through the supra-regional bio-centre Hukvaldy will represent a significant interference into the landscape. The influence of the local watercourses and their bio-corridors, which the proposed route crosses, is also not negligible. Several watercourses will be bridged. The bridge objects are proposed in a way, which would enable the animal migration and they meet at the same time parameters of hundred-year water.

These negative factors have only a local character and they can be eliminated by suitable technical measures, or eventually decreased to tolerable levels. The transit traffic would be diverted and the construction of the solved section and finishing of the whole beltway would decrease the share of other traffic in the parts of housing developments in Frýdek - Místek. The interferences into the given area are thus acceptable in terms of the regional and supra-regional importance.

Pertaining measures for lowering the negative environmental impacts of the construction realization and limitation of potential risks are proposed in the previous chapter.

We agree with the construction of the assessed road section, if all measures proposed in terms of this documentation would be applied and if the beltway around the city of Frýdek-Místek would be finished in the originally intended form and on a corresponding technical level.

Main author: Mgr. Vladimíra Hoňková

Authorized researcher: P.g. Věra Tišnovská
professional competence ref. no. 6334/1013/OPV/93



Approved by: Ing. Dan Köhler/
director of the geology and environment department

In Ostrava in February 2002.