NON-TECHNICAL SUMMARY

The territory, through which the 3rd railway corridor being assessed passes, has always belonged to the territories with significant strategic transportation position. This was also one of the main reasons, for which construction of railway from Prague to Pilsen began to be considered already in the 19th century.

Within the framework of the international agreements, the Czech Republic undertook to modernize the railway line routes in our territory in order to facilitate thoroughfare of international train sets. In 1993 the work on the Czech Railways project – Modernization of the Selected Railway Corridors - commenced. The routes of four main railway corridors passing through the Czech Republic territory were earmarked. In 2001 Government Resolution No. 145 on compliance with the main development objective was adopted – to complete the basic modernization of the whole transport infrastructure until 2010.

The railway line in the section Beroun – Zbiroh is a part of the so-called 3rd transit corridor. By means of its inclusion in the modernized corridors network, its core significance both for domestic and in particular for international transport was re-confirmed.

The optimization has been drawn up on the basis “Principles of modernization and optimization of the selected railway network of the Czech Railways” published by the Strategic Section within the Directorate General of the Czech Railways in June 1994. In fact, constructional reconstruction of the existing line of the Czech Railways **is concerned**. With high extent of simplification we may say that these constructional adaptations shall ensure the possibility to use critical running speed (140 km/h), introducing of traffic clearance usual in the European railway network (enabling transportation of trucks on railway wagons) and achievement of higher carrying capacity for the train sets (this shall enable increase in the number of the trains passing through). Last but not least, it shall also enable to achieve corresponding securing of the traffic from the point of view of the operator and particular users. Thus not a completely new construction in the “green field” is concerned. Considerable “improvement” of the existing, frequented railway line is in question. The construction is located, to the maximum possible extent, on the land of the rail, and as regards direction and height, it is lead in the existing body of the rail. The project implementation shall take place under railway operation. The optimization includes complete remediation of the substructure, superstructure, rebuilding of bridges, culverts, reconstruction of railway crossings, of the traction line of the safety device. The main tracks shall be reconstructed in the whole section being assessed.

The territorially-technical study of the above-mentioned project has been drawn up in one variant and this variant has become the subject-matter of the *Notification* being submitted.

In the following paragraph, a brief **outline of technical and technological design** of the line optimization is given as this is known at the level of the territorially-technical study. The purpose of the optimization is to bring the block section into constructional-technical and operational conditions so that it might comply with the parameters stipulated in the agreements drawn up at the level of the European Union and of the International Union of Railways . For the traveling public, it shall bring higher quality of the services offered by the Czech Railways that will show up in particular in higher degree of safety, comfort and transport speed. The proposal of the optimization's directional design respects the existing line running. In consequence of non-conforming parameters, the optimized line leaves the existing body in total 5 times and is lead in the new route in the total length of 7,560 m. In several sections, line realignments shall occur for the reason of straightening of curves with small diameter. A new tunnel is designed in the section near Osek that shall be built from an open and subsequently buried pit. In the sections of the new realignments, the line leaves the existing railway territories, and thus the property settlement with their current owners shall be necessary. The main tracks shall be reconstructed in the whole section assessed. All railway crossings and overpasses shall be reconstructed in the section in question, as well as the bridges and culverts. The technological equipment, communication plants and safety devices interlocking the traffic in the block section being assessed have been designed so to comply with the optimization requirements. Within the framework of the construction, it shall be necessary to build also the buildings, the realization of which is absolutely necessary. All the existing and non-conforming (for the regulations on the corridor structures, the standards of the new railway design) platforms in all stations and halts shall be reconstructed. Location of the reconstructed platforms comes out from the new rail yard design and the edge of platform height of the reconstructed and newly built platforms shall be 550 mm above the top of the adjacent rail. In Zdice there shall be two intermediate platforms (between the tracks No. 1-3, 2-4) and in Hořovice there shall be one (between the tracks No. 1-2) and the level platforms to the extent according to the traffic requirements. Within the optimization framework, the halts Popovice and Cerhovice shall be situated in a new location for the reason of new directional running of the line in this section.

Barrier-free access to the platforms has been solved, too. The optimization shall take place under full railway traffic, but it will require a number of long-term closures. It is assumed the optimization shall commence in 2006 and shall be completed in 2009. The exact time

schedule of realization of particular constructions shall be specified in the following degrees of the project documentation.

With its extent, the optimization **fulfils the conditions** stipulated by Act 100/2001 Coll., on Environmental Impact Assessment and on amendments to certain related acts, and therefore it has been assessed further in accordance with this act. The *Notification* of the railway corridor optimization impact assessment being submitted was drawn up in the course of 2005 and in its division it complies with the above-mentioned act. The extent of elaboration of the particular chapters is given then by the significance the construction has for the particular environmental component.

In 2004 the documentation concerning the application for the planning permission procedure for the above-mentioned project was drawn up. Compared to the data in the territorially-technical study, significant changes in the railroad relocations occurred. Their total length exceeds 1 km and the project being assessed fulfils thus the criteria stipulated by Annex 1 to the Environmental Assessment Act, namely both of category II, clause 9.2, and category I, clause 9.1- New constructions of railway lines longer than 1 km. In accordance with Act No. 100/2001 Coll., this is thus a project that is assessed within the whole EIA process and for which the authority having subject-matter and local competence is the Ministry of the Environment.

In the course drawing up of the *Notification*, a number of field surveys focused on determination of the current status of the particular environmental components were carried out.

The Notification has been drawn up based on the existing legislation, current knowledge on the status of the particular environmental components in the railway line section in question and has come out, within the input data framework, from the materials at the degree of the territorially-technical study.

The construction as well as the traffic itself in the optimized corridor section shall impact its surroundings in the same way as other human activities. *The Notification* being submitted has dealt with recognition and significance of these impacts, including their possible elimination or reduction.

The optimization of the body of the rail shall take place prevailingly in the Czech Railways territories in the place of the existing body of the rail. However, for partial adaptations in the

directional running, the project implementation would require conquest of certain pieces of land the Czech Railways do not use today and that are in the ownership of other entities. The realization itself of the project of the railway line optimization shall represent temporary and permanent **conquest of the agricultural land resources and of the land intended to perform the forest functions.** The agricultural land conquest shall be above all short-term, where it shall be necessary to establish areas enabling performance of the construction works (so-called establishing of a construction site) near some building objects (bridges, culverts, etc.) in peripheral parts of the strips of the field. Upon completion of the work, these areas shall be brought into original status.

The impact on **geological conditions and raw materials deposits** is not assumed. In the same way, long-term influencing of **surface and ground-water** has not been documented.

The impacts on the **climate** within the whole territory being monitored are not assumed. Influencing of the **air cleanliness** shall occur only within the short, clearly defined period of realization. The reason shall be in part increased road freight traffic (air burdening with exhaust gases); in part great construction sites areas that shall be the source of airborne dust. For the reason of maximum possible reduction of the air burdening with the pollutants, a number of measures have been recommended. With regard to the electrification of the line, after putting of the optimized section into operation, the environment shall not be polluted in consequence of thoroughfare of the train sets.

The noise burden of the surrounding housing development has been evaluated as the most significant impact connected with the corridor operation. For this reason, two noise studies were drawn up by the company EKOLA group, spol. s.r.o. in 2004. One deals with the assessment of the influence of the construction on the acoustic situation in outdoor environment during the construction and the other one during operation.

In order to assess acoustic situation in outdoor environment in consequence of the railway line optimization, authorized noise measurement had been carried out in selected locations, which enabled to draw up an overview of the existing noise burden along the railway in the subsequent noise study. Based on the known number of the passing trains and their speed upon completion of the optimization and some other indicators, a noise burden model has been drawn up for the situation after putting of the optimized section into permanent operation. On the basis of this model, the anti-noise measures have been proposed then. These are anti-noise screens (total length of ca. 9.281 km) and individual anti-noise measures.

Due to modernization of the line connected with the operation of the new set of wagons, also significant reduction of the generated **vibrations** is expected.

In general, it is possible to state that the **waste** that will come out into existence in the course of the constructional works shall be carried away and disposed of in accordance with the existing legal regulation. This activity shall be ensured from the part of company carrying out the construction or by a specialized company dealing with waste treatment. The main component part of the waste will be borrow earth soil, part of the current ballast base and material from the demolitions of some buildings. Besides the waste classified as the so-called other waste, also the waste will arise that is classified in the dangerous waste category due to its properties. This shall be in particular the ballast base from the area of switches polluted by oil substances, demolition material from some roads containing tar, etc.

In the course of the operation, above all plant material shall prevail in the waste coming into existence during removal of vegetation from the clearance profile of the line for safety reasons. In addition to that, the waste shall be produced within usual maintenance or minor repairs of the railway equipment.

The landscape and nature protection interests shall be most affected in case of constructional adaptations of bridges and culverts, where the intervention in the natural migration corridors and in the corridors defined within the territorial environmental stability systems shall occur. The railway corridor, due to the mature wood species accompanying it along the part of its length, also represents a significant migratory corridor for small songbirds. Also the land overgrown with a bush floor provides convenient conditions for nesting of small bird species. As the most valuable habitats from the point of view of occurrence of animals, in particular the forest stands still preserved here and there appear (in particular between Zdice and Popovice, in the surroundings of Hořovice), some water courses with planes (Červený potok, Litavka, etc.), rich shrubberies along the railway and the system of Popovice ponds with wetland habitats around them. Occurrence of a whole number of animals has been found out in the location in the proximity of the railway, some of them belong even to the specially protected species. In particular sand lizard (*Lacerta agilis*) or spiny loach (*Cobitis taenia*) is in question.

With regard to the fact that the railway line has been stabilized in the given territory since the second half of the 19th century, the negative impacts on the **landscape** (within the meaning

of its landscape character) connected with its directional and height running are not assumed.

Upon evaluation of all indicators mentioned in this *Notification,* we may state that the optimization of the 3rd railway corridor in the variant submitted and under compliance with the terms and conditions proposed in the text, is an environmentally acceptable structure, with certain significant positive impacts on its surroundings, and therefore we recommend its realization.