Ministerstvo financií
Slovenskej republiky

MINISTERSTVO
DOPRAVY, VÝSTAVBY
A REGIONÁLNEHO ROZVOJA
SLOVENSKEJ REPUBLIKY

# Spending Review of Transport

## Final report - summary

October 2016

## Introduction

The Slovak government has launched Value for Money project that aims to reform rules, set up processes and strengthen institutions that will in turn support adoption of good decisions in public interest and significantly improve value for money in Slovak public sector.

One of the VfM's tools is a complex revision of majority of public spending. The government has committed to this revision through its programme declaration. Further plans were detailed in the Stability programme of the SR.

Health system, transport and public sector digitisation reviews were conducted in 2016. The majority of public spending will be reviewed in the present government term. Efficiency and effectiveness of spending will be evaluated and actions identified that will increase public finances' VfM This will allow for fiscal savings, better public services for citizens (outcomes) and/or transfer of resources/finances to government priorities. The proposed measures are sustainable in the long-term.

A preliminary report has identified sectors/areas with greatest reserves in effectivity improvement. The final report offers a more detailed view of the drafted problems and measures. The report is part of the government budget.

Developed countries use spending revision as a standard tool that helps governments to find reserves in public policies for more effective use of public resources as savings necessary to meet national and European fiscal commitments.

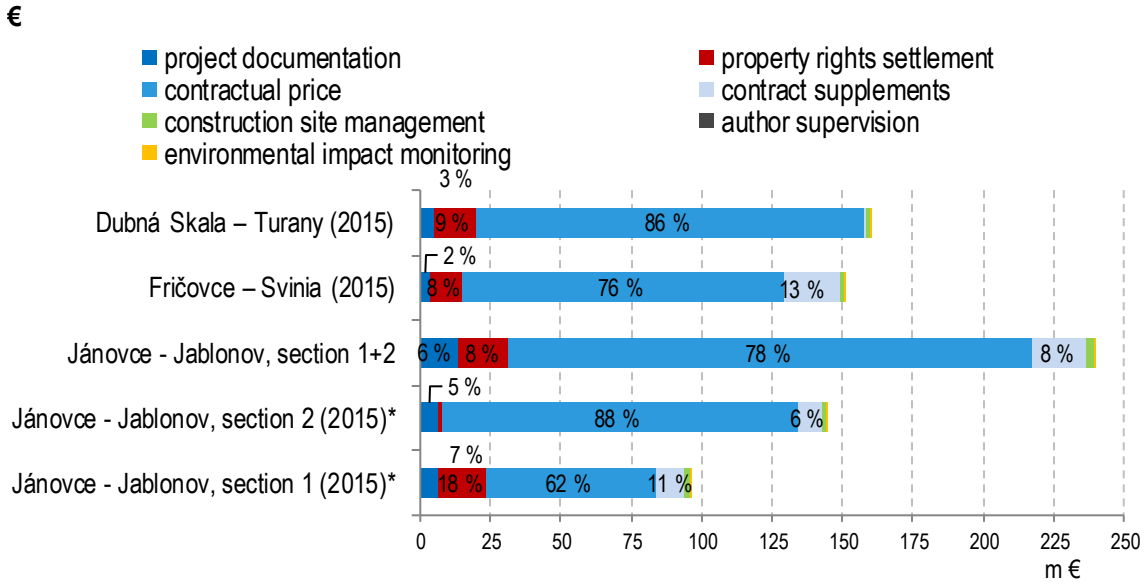
A key part of the evaluation is to identify and correctly evaluate all costs and benefits. Financial costs and benefits are the basis. The analysis also aims to quantify (in financial terms) as much of non-financial costs and benefits as possible allowing the state to obtain a complex overview of costs and benefits of individual projects.

## Executive summary

**Review of transport spending totalling 2.4% GDP (€2.0bn)** per year has set a goal to prepare measures for improving efficiency in capital as well as operating expenditures. The measures will allow for more efficient investments without cutting the overall capital expenditure envelope, and for sustainable reduction of unit operating costs in the budget of the Ministry of Transport.

### *Investment projects planning and preparation*

**Figure 1: Total spending on motorway and expressway projects commissioned in 2015 (without VAT)**




Note.: Author supervision is usually part of the contract with the contractor *Source: NDS*

* Jánovce – Jablonov sections 1 and 2 probably had joined property right settlement

Future benefits, quality, and costs of investments are, to a large extent, determined by the planning and preparation processes of investment projects. Transparency and control in all processes stages will be strengthened, among other means by publishing data and documents to the public. The construction cost represents only a part of the total motorways and expressways project cost. Other significant expenses are for project documentation, property settlement (purchasing and expropriation of land). According to the Ministry of Transport, the project preparation for motorways and expressways takes 7 years in average, however, preparations for a number of still unfinished projects have commenced over 10 years ago. The National Highway Company (NDS) has spent €12m on project preparation and land purchases of non-priority projects.

In some cases, the actual prices in construction contracts have shown significant deviations from the contract value estimates (PHZ) used in the public procurement documentation. Inflated prices distort the cost portion of CBA analysis and therefore might influence the choice of alternatives. Furthermore, PHZ represents a crucial piece of information for tender applicants on what is the expected bid. The assumption is that the actual bids will be lower. At least in the case of railway projects, the inflated prices resulted from systematic unit cost overpricing in existing price databases. A study made for the EC by COWI specifically points out the unsuitability of the price database CENEKON for use in project pricing.

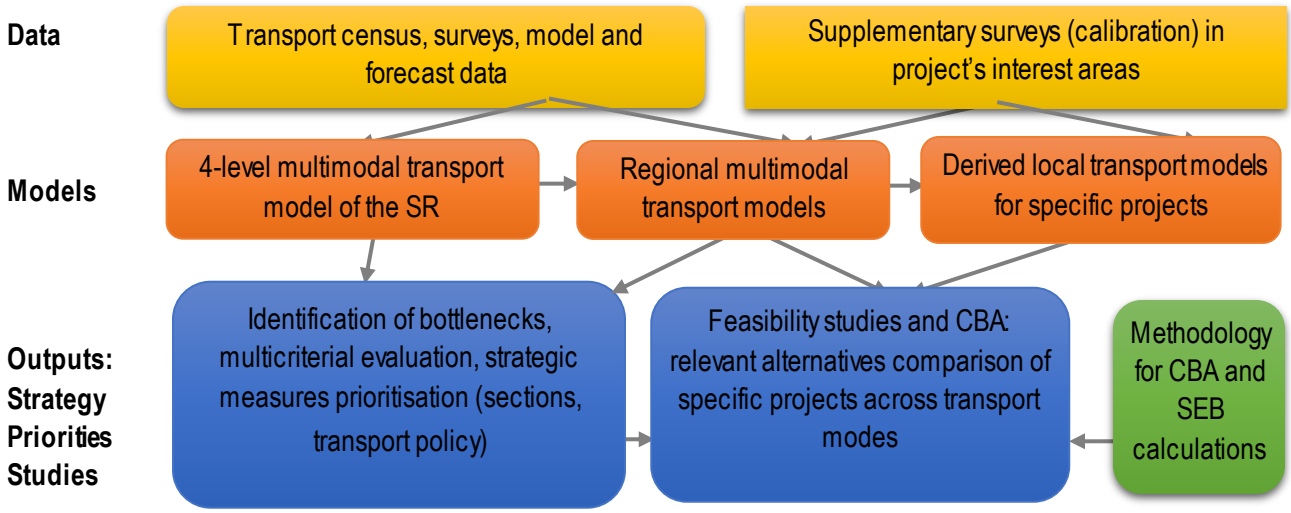
The environmental impact assessment (EIA), coordinated by the Ministry of Environment (MŽP), is an important step in investment preparation. MŽP's final opinion is binding for any further authorization procedure. Feasibility studies are required in all projects financed by EU funds in the 3rd multiannual financial framework 2014-2020. Since the majority of projects have had their EIA process completed and MŽP had already issued its opinion, feasibility studies were conducted only additionally and merely confirmed the selected road layout alternative. For new projects, feasibility studies (that also include CBA) are carried out at the beginning of the planning process.

The selection process of transport projects is subject to comprehensive evaluation. Projects, where a feasibility study is conducted, should build mainly on cost-benefit analysis (CBA) that quantifies not only the effects of projects

on transport but also the environment and public health effects. The CBA compares projects and their alternatives by expressing the costs and benefits of each alternative in monetary terms. The goal is to shift, as much as possible, away from qualitative analysis and towards the quantification of all possible project costs and benefits. Not all effects in transport can be quantified, hence CBA will continue to be supported by multi-criteria analysis. Evaluation should always clearly define the project's objective and several realistic alternatives of reaching it. This includes alternative road layouts and geometric designs and, if necessary, takes into consideration all modes of transport and possible regulatory policies.

***Transport data, models and CBA methodology***

**Figure 2: Data, models and outcomes – objectives**




There are three basic preconditions for quality transport projects preparation: Quality and consistent transport data, reliable national multimodal transport model, and a unified CBA methodology. The majority of transport data that could be used for unified transport forecast modelling is still either missing, not available, or inaccurate and inconsistent with neighbouring countries.

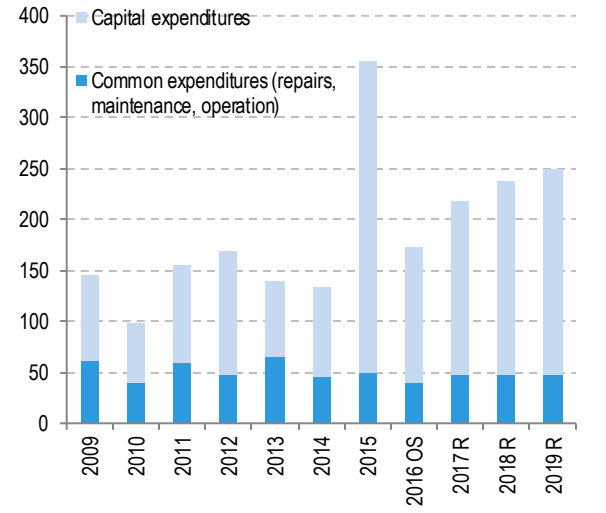
Data collection and publication in user-friendly form is important. The most potential for greater use is in data that has legal limitations to its distribution amongst public administration organisations, data that, despite their public character, are private property, or in data that is not processed in a form usable for this purpose (aggregated suitably for transport modelling).

Different CBA calculation methodologies have been used in individual transport projects during the recent years. It will be important to update the current CBA methodology so that it allows for comparison and prioritisation of projects in the entire country and across all transport modes.

***Motorways, expressways and class 1 roads***

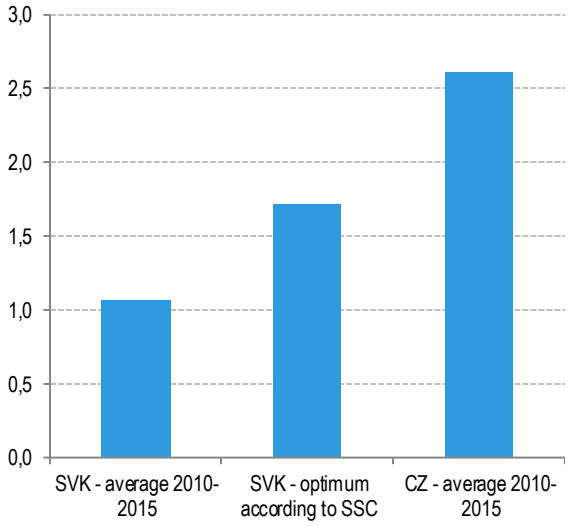
Spending on motorways, expressways and class 1 roads equalled approximately €1.15bn per year in 2014-2015 and is expected to reach similar volume in 2016. A high proportion of class 1 roads is in bad or inadequate condition due to the lack of financing for repair and maintenance. Consequently, they must be reconstructed at a high cost. On the other hand motorways and expressways are in a relatively good state.

**Figure 3: Expenditure of the Slovak Road Administration (m €)**




*Source: MDVRR SR, RVS*

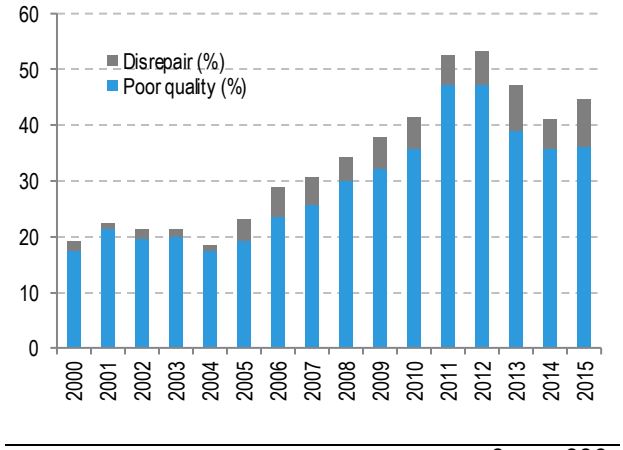
**Figure 4: Class 1 roads repair and maintenance costs (excluding winter maintenance) per sq. km (m €)**




*Source: SSC, MDVRR SR, SFDI, MF SR, ŘSD, Eurostat, own calculations*

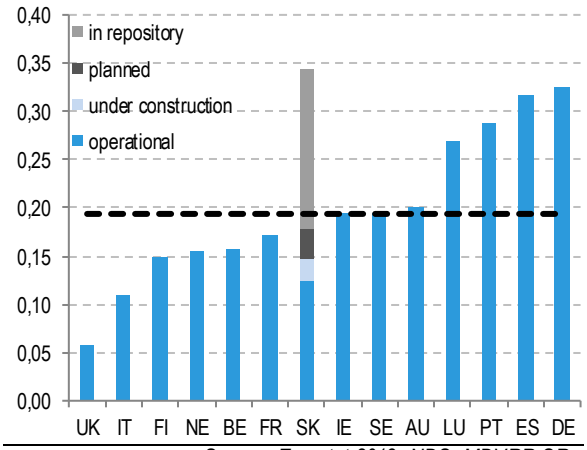
Compared with the EU15, Slovakia had fewer motorways and expressways in 2013, which is typical for converging countries. The completion of the priority transport projects would shift Slovakia close to the EU15 average. In the 2017-2019 budget, €1.7bn is allocated for new motorway and expressway construction, making it the largest expenditure item of the ministry.

**Figure 5: State of class 1 roads**




*Source: SSC*

**Figure 6: Motorway length per number of inhabitants* (km/1000 inhabitants)**



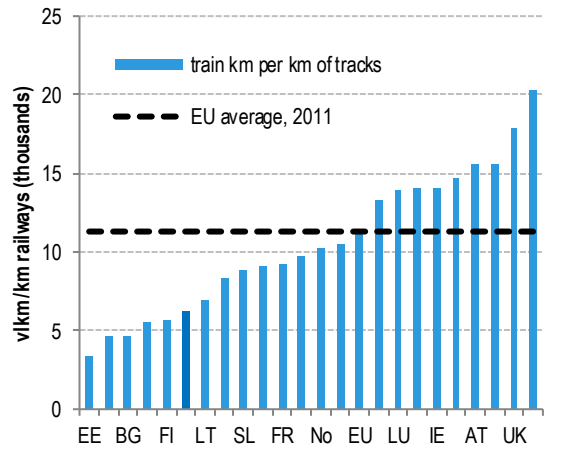

*Source: Eurostat 2013, NDS, MDVRR SR*

The Ministry of Transport in cooperation with the Ministry of Finance will evaluate the efficiency of high priority investments with the goal of achieving the highest possible value for money. Construction through public-private partnership (PPP) is considered as any other alternative and, as a result, should be used only in cases where it is demonstrably more favourable for the state.

### *Railways*

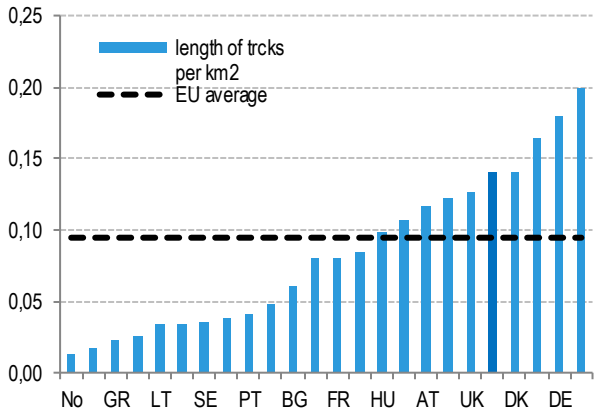
Railways of the Slovak Republic (ŽSR) operates a dense railway network with low utilisation of existing capacity. A large proportion of railways is in bad condition due to the lack of funding. Many sections have limitations/restrictions that force the trains to slow down.

**Figure 7: Annual railway network usage intensity, 2011**




*Source: EC monitoring of rail markets*

**Figure 8: Ratio of railway length (km) to the total area, 2011**

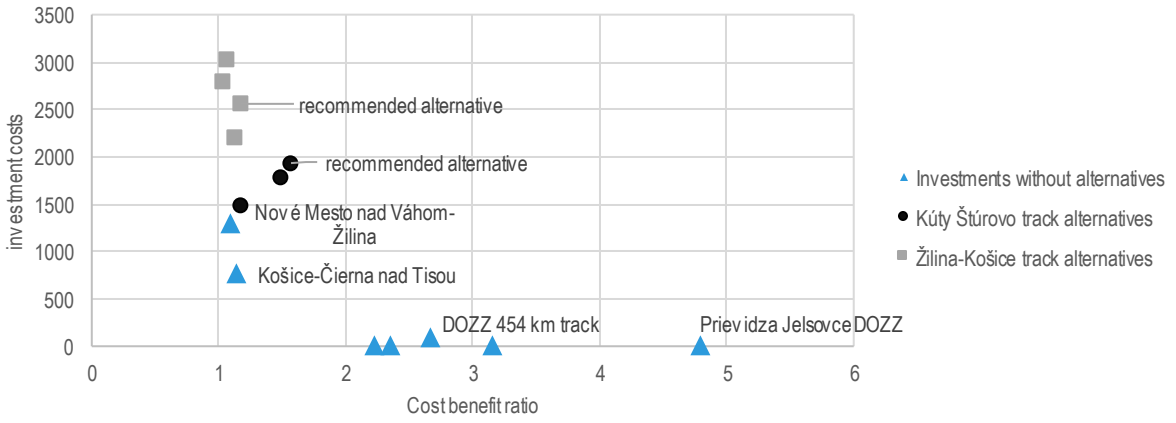



*Source: Eurostat*

Further options for spending optimisation are in changes to the cost structure. This can be achieved through rationalisation measures (higher level of automatization and use of technology causing lower personnel needs, railway traffic management centralisation), reducing the extent of railway infrastructure (tracks and real estate) and by process optimisation.

The spending review has shown that small investments in traffic management projects can produce far more benefits than corridor modernisations. Furthermore, railroad tracks that are scarcely used and offer no public train service produce much higher operational expenses than benefits. As a result, a comprehensive analysis of their strategic value is necessary. Revaluation of benefits of tracks with public transport but low usage is also necessary.

**Figure 9: Costs and benefits ratio of transport management change investments (DOZZ) and track modernisation.**

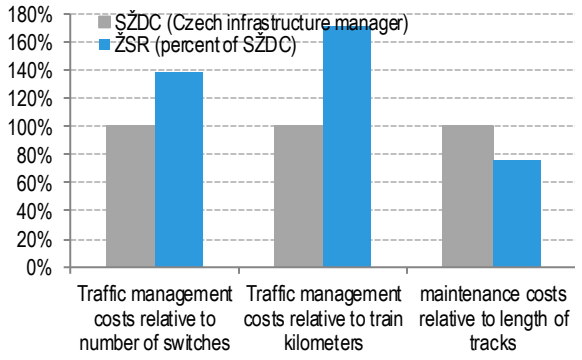



*Source: Feasibility studies, ŽSR, MDVRR SR*

Track modernisation for a maximum speed of 160 km/h was done on 19% of class 1 tracks, however, their potential is not fully utilised. Ministry of Transport in cooperation with the Ministry of Finance will continuously evaluate railway investments efficiency in order to achieve the highest possible value for money.

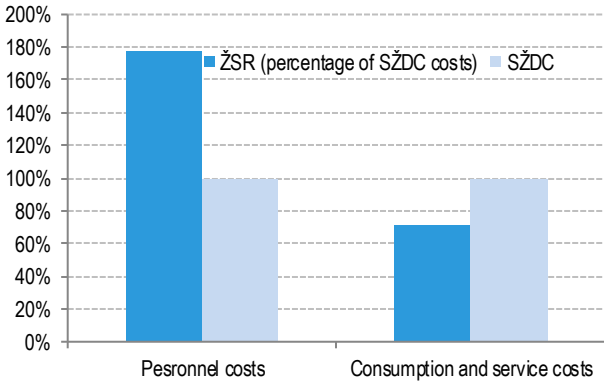
Slovakia spends significantly more on traffic management but less on maintenance than the Czech infrastructure administration (SZDČ). This may be caused by the lower level of modernisation of railway infrastructure in Slovakia compared with the Czech Republic. If the cost of traffic management relative to train-kilometres (train-km) was at the same level as in the Czech Republic, ZSR expenditure could potentially decrease by €33m. However, cost reduction requires one-time investments.

**Figure 10: Unit costs difference between ŽSR and ŠZDC , average for 2013-2015**




*Source: SŽDC, Annual reports of ČD and ŽSR*

**Figure 11: Unit costs structure of ŽSR and ŠZDC per km of tracks, average for 2014-2015**



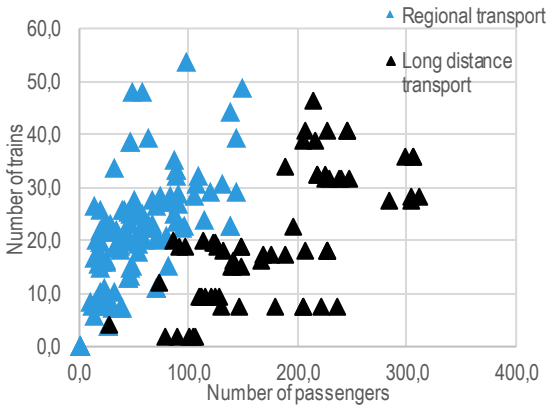

Note: including property management ČD

*Source: Annual reports of SŽDC, ČD a ŽSR*

### *Public transport*

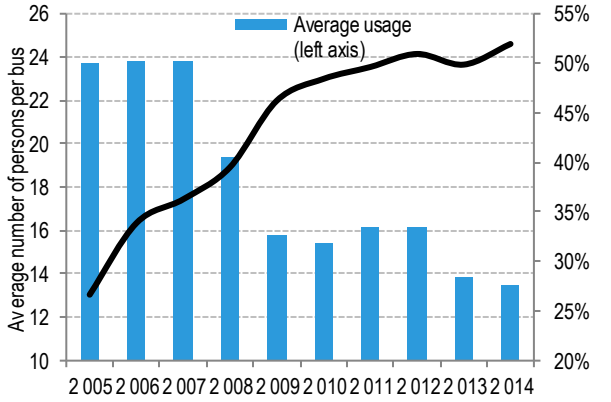
The Slovak Rail Company (ZSSK) should make more efficient use of its vehicles. The company's output of train-kilometres is dictated by the volume of services ordered by the state in public interest. Average Czech train set covers approximately twice the distance of its Slovak counterpart. Moreover, ZSSK operates lines with low average usage. In 2014 as many as 56% of regional trains carried less than 50 passengers on average. Other lines appear to be highly used and an increase of their train numbers should be considered.

**Figure 12: Average number of passengers travelling by train and average daily number of trains on individual lines (2014)**




*Source: ZSSK*

**Figure 13: Utilisation and cost subsidies in suburban bus transport**




*Source: MDVRR SR, costs and subsidies data for 2013 – 2014 are available for Zilina, Trencin and Banska Bystrica regions only*

Demand for bus transport has declined by 45% since 2006 while subsidies for transport service operation in the public interest increased by 79%. Average utilisation of buses fell to 14 passengers per bus by 2014. At the same time subsidy proportion increased to 50% of costs.

Room for significant improvement of value for money is in bus and train service harmonisation. Low efficiency in public transport can partly be explained by the undesirable concurrence of buses and trains as well as insufficient coordination between individual transport modes.

***Measures based on the spending review***

The review has identified 32 measures in the following areas that have significant room for spending efficiency improvement and better outcomes measurement in transport:

1. **Project evaluation and prioritisation.** Based on the review's conclusions, an economic evaluation of the upcoming projects will be carried out. The goal is to find the optimal scope of primary road infrastructure and construction prioritisation. The pipeline of investment projects for infrastructure construction represents approximately €9bn.

2. **Higher funding for maintenance and repair of class 1 roads. A** large portion of class 1 roads is in bad condition. It is necessary to increase spending on maintenance and repair along with investments in new infrastructure.

3. **Cut operational costs of railway infrastructure.** Cost cutting is possible through reducing the extent of little-used infrastructure and changes to traffic management. These changes require initial investments.

4. **Investment projects preparation.** The review has identified possibilities for improvements in methodology, data collection and project selection.

Abbreviations

| | |
|---|---|
| PHZ | Expected contract cost |
| MDVRR | Ministry of Transport, Construction and Regional Development |
| NDS | National Motorway Company |
| EIA | Environment impact assessment |
| MŽP | Ministry of Environment |
| SSC | Slovak Road Administration |
| ŽSR | Railways of Slovak Republic |
| ZSSK | Slovakrail |
| SŽDC | The Railway Infrastructure Administration, state organization (Czech Republic) |
| ČD | Czech Railways |
| DOZZ | Remote safety management system |
| SFDI | State Fund for Transport Infrastructure |
| RSD | Road and Motorway Directorate |