**Ex-post CBA** **D1 Mengusovce – Jánovce**

The Grant Agreement for the highway project „D1 Mengusovce – Jánovce“ was signed on 27. 12. 2004. It was a financial contribution for the construction of 25,85 km of the highway D1 Mengusovce – Jánovce.  The Beneficiary (National Motorway Company, hereinafter as “NMC“) received a financial contribution of **6 051 910 007,12** **SKK (200 886 610 EUR)**, consisting of the contribution of **EUR** **170 753 618** from the European Regional Development Fund (85 % of the total amount) and the contribution of **EUR** **30 132 991** from the state budget (15% of the total amount). The contribution was determined on the basis of the financial analysis of the project’s cost/benefit analysis (CBA). The highway D1 Mengusovce – Jánovce is completely in operation since December 2009.

As the Managing Authority, the Ministry of Transport and Construction of the Slovak Republic proceeded to an ex-post review of CBA to improve the quality of future CBAs for road projects, to refine transport modelling of future projects and to help to update the CBA Methodological Guide (if proven necessary).

This activity will contribute to increasing the efficiency of expenditure of public and EU funds.

The following actual input data for the period from 2005 to 2018 were considered for the ex-post CBA:

*GDP – source: Statistical Office of the SR, Ministry of Finance of the SR, Slovak CBA Guide OPII*

*Inflation – source: Statistical Office of the SR;*

*Investment costs – source: National Motorway Company accounting;*

*Traffic intensity – source: nation traffic census 2005, 2010 and 2015, automated traffic counters of NMC;*

*Operation and Maintenance costs – source: National Motorway Company accounting;*

*Revenues – source: National Motorway Company accounting;*

Subsequently, the CBA of the entire project was recalculated including predictions until 2034 using the currently valid methodology for the Operational Programme Integrated Infrastructure (2014 - 2020). The original CBA was calculated using the methodology of the previous Operational Programme Basic Infrastructure (2004 - 2006).

**Evaluation of financial analysis**

Investment costs of the Project, according to National Motorway Company accounting, are 388 309 805 EUR.

The residual value is calculated on the basis of the lifetime of the infrastructure components, which represents the value of 125 143 732 EUR, and enters into the financial analysis in discounted value of 40 127 515 EUR.

|  |  |
| --- | --- |
| **Revenues, EUR** | **Total** |
| With project – D1 | 78 850 583 |
| With project – parallel road | 4 175 987 |
| Without project - parallel road | 87 402 347 |
| **Incremental revenues** | -4 375 777 |

Operating revenues are generated from toll collection on road sections that are planned to be toll collection bound. A combined toll system is operated on selected network of motorways, expressways and other highways. The use of toll stickers is compulsory for vehicles up to 3.5 tons. Heavy vehicles are obliged to use introduced electronic toll collection system. Discounted incremental revenues represents value of -5 349 169 EUR. The updated CBA includes the difference of toll revenues between the D1 section and the parallel road I/18.

|  |  |
| --- | --- |
| **Operation & Maintenance costs, EUR** | **Total** |
| **With project – D1** |  |
| Routine maintenance costs | 54,253,246 |
| Periodic maintenance costs | 27,978,237 |
| **With project – parallel road** |  |
| Routine maintenance costs | 15,733,761 |
| Periodic maintenance costs | 12,692,640 |
| **Without project - parallel road** |  |
| Routine maintenance costs | 15,733,761 |
| Periodic maintenance costs | 20,501,668 |
| **Inkrementálne náklady na údržbu a opravy** | 74,422,455 |

Operation and Maintenance costs were calculated according to CBA Guide OPII. For the situation Without the Project and With the Project the changes in periodicity of routine maintenance are suggested during the reference period. Taking into account the periodic maintenance costs cycles, the start of the cycles in the situation With the Project was considered one year after the construction completion date. According to the CBA Guide OPII, maintenance costs can be derived from surface areas of (main) infrastructure components, such as pavements, bridges and tunnels. Unit costs of routine and periodic maintenance for roads and motorways are taken from the CBA Guide OPII and they were adjusted to the price level of 2018 by inflation.

The project generates revenues, but the part of the project’s investment costs is not covered from the revenues of the project. Due to this, additional financing is covered by community assistance. The value of EU grant is 85% of eligible costs. The remaining 15% of the eligible costs will be covered from the SR government budget contribution. This information is shown in the following table.

|  |  |
| --- | --- |
|  | **Aktuálna CBA** |
| **Not-Discounted** | **Discounted** |
| Total investment costs | 381 286 821,41 | 343 447 529,90 |
| Residual value (financial) | 125 143 732,29 | 40 127 514,80 |
| Revenues |   | -5 349 169,00 |
| Operating and maintenance costs |  | 32 130 819,35 |
| Net revenues (Revenues - Operating and maintenance costs + Residual value) |   | 2 647 526,45 |
| Net cash flow (Total investment costs – Net revenues) |   | 340 800 003,44 |
| Funding gap (Net cash flow/Total investment costs) |   | 100% |

**Final evaluation**

The CBA's retrospective assessment showed justification for funding the project from EU funds. The financial analysis has confirmed the assumption that the project is unable to fully cover the expenditure of its revenue, and therefore a financial contribution from the European Regional Development Fund is justified.