

REPUBLIC OF BULGARIA

**MINISTRY OF TRANSPORT, INFORMATION TECHNOLOGIES
AND COMMUNICATIONS**

**„INDEPENDENT EVALUATION OF THE OPERATIONAL PROGRAMME
TRANSPORT 2007-2013 ”**

**Lot No 2: „Interim evaluation of the progress and the overall
implementation of the Programme”**

Contract: Д-29/27062011

**Executive Summary of the Final Report of the
Evaluation**

Consortium WYG and Partners

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9 January 2012

Executive Summary

of the Final Report of the mid-term evaluation of OP Transport by WYG and Partners, 2011

INTRODUCTION

The mid-term evaluation of the progress and the overall implementation of the Operational Programme "Transport" 2007-2013 (OPT) was carried out under the contract "Independent evaluations of the Operational Programme "Transport" 2007-2013" signed between the Ministry of Transport, Information Technologies and Communications (MTITC) and Consortium "WYG and partners", between June and December 2011.

The evaluation covers the period from the beginning of the Programme till 30th June 2011. For reasons of consistency, any developments following that date were not considered.

This document provides a summary of the findings, conclusions and recommendations of that evaluation. It is structured as follows:

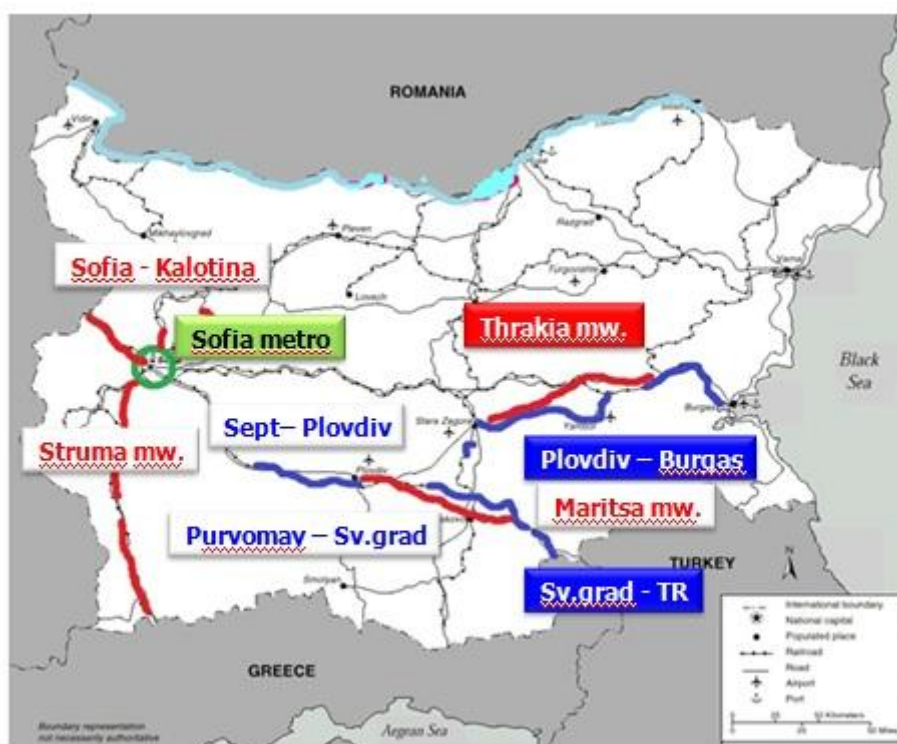
- Chapter 1 provides a short overview of OP Transport;
- Chapter 2 reviews the evaluation methods used during the evaluation;
- Chapter 3 summarises the main findings of the evaluators;
- Chapter 4 formulates conclusions and replies, by thematic area, to the questions that formed the basis for the evaluation;
- Chapter 5 contains Early warning report.

The main conclusion of the evaluation report is that OP Transport, following a slow start, is by now picking up speed. Recent efforts of the Managing Authority have led to a real turn-around in OPT's fortunes. Should current trends continue, the OPT can be implemented without a significant loss of funds. The recently proposed reallocation and the planned "overbooking" of funds are also expected to contribute significantly to that.

At the same time, programme performance under the individual priority axes is very much uneven. Most importantly, no progress was recorded with regard to multi-modal freight transport under Priority 3 and water transport under Priority 4. If the OPT is to deliver the economic and social impact expected, significant efforts will be necessary to identify and implement new projects in these two areas. Furthermore, a disproportionately large part of the results so far is attributable to one single project: Sofia Metro, under Priority 3. In line with the recently approved modification of OP Transport, the 2nd stage of the same investment is expected to boost performance under Priority Axis 1 (Rail Transport), while results, although still small, were already reported by 30 June 2011. An acceleration of progress under Priority 2, road transport, is foreseeable, mostly thanks to the Maritsa and Struma motorway projects. The progress under Priority Axis 5 (Technical Assistance) can be seen as proportionate to the time that has passed since the start of the programme.

Overall, while financial performance is improving, no infrastructure project has been completed as yet. Accordingly, the OPT has not yet had any discernible impact on the Bulgarian transport sector, or the economy as a whole. Potentially, the implementation of the projects already contracted, or at an advanced stage of preparation may have a significant positive effect on at least rail and road transport, upgrading important transport corridors with both national and cross-border significance – provided that the current positive trend continues, as well as the alternative transport modes (both rail and metro are "green projects").

1 - OPT infrastructure projects contracted or at an advanced stage of preparation



In order to achieve that, the evaluators recommended that the Bulgarian authorities, including both the MA as well as the beneficiaries, further strengthen their administrative capacity, both through training of the existing staff, and contracting of external experts. The introduction of a performance-based remuneration system in all the involved agencies should also be considered.

Another major factor of acceleration would be reinforced investment of OPT resources into project preparation – for the current and the next programming period alike. This should, on the one hand, allow for the Managing Authority to contract a higher proportion of the projects originally included into the Indicative List of Priority Projects (ILPP) of the OPT. On the other hand, it would speed up the actual start of construction, which is becoming more and more important as the end of the programme period draws closer, and the N+3 / N+2 rule becomes effective. Last but not least, this would facilitate the quick start of the next programming period.

Another area of possible improvement would be to increase efforts to provide quick, reliable, and easy-to-apply management advice and IT-tools to project beneficiaries. This should also be conducive to improving programme monitoring, and the measurement of progress at the level of indicators (which, at the current stage, is not yet satisfactory).

The speed of financial management by the programme authorities – above all that of payments by the MA to the beneficiaries – is, of course, another decisive factor for programme progress and the timely use of funds. In the absence of detailed data, this could not be measured. Nevertheless, the MA should regard the streamlining of management, reporting and payment procedures as a constant and recurring task.

The evaluators also recommend that the Bulgarian Authorities consider some important changes as regards the legal and institutional environment in which OP Transport operates. Problems related to the acquisition (expropriation) of land necessary for physical infrastructure projects, the attainment of construction licenses and environmental permits, as well as archaeological excavations were reported by several beneficiaries. The review of relevant legal rules – possibly involving “fast track” administration for EU-funded projects by licensing authorities, and courts – could have a significant positive effect already under the current period, provided the responsible ministries are ready to undertake a concentrated effort. This, of course, would benefit several other Operational Programmes, too.

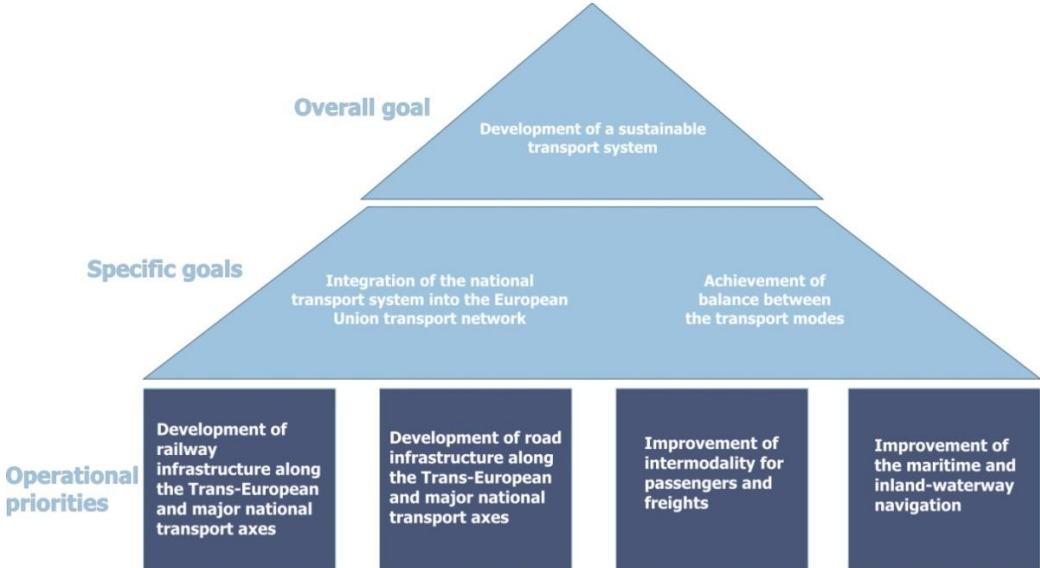
Furthermore, most beneficiaries reported difficulties with regard to project financing. On the one hand, there are both cash-flow issues, related to the low level of advances provided by the state budget to project beneficiaries. Furthermore, beneficiaries subject to Value Added Tax complained about difficulties with the financing of the VAT related to their works contracts. In this context, it should be remembered that at the start of the OPT the Commission provided a 10% payment on account (advance) to the state budget, with the specific objective of ensuring sufficient liquidity to implement the programme. Furthermore, the implementation of all OPT projects leads to significant tax revenues for the state budget, which are higher than the national co-financing rate (18,92%) of the operational programme.

The detailed recommendations of the evaluators can be found in the full evaluation report.

1 OPERATIONAL PORGRAMME TRANSPORT 2007-2013

The Operational Programme "Transport" 2007-2013 is one of the seven operational programmes of the Bulgarian Government, which was officially approved by the European Commission on 7 November 2007. The Programme has the largest budget of all seven operational programmes, amounting to BGN 3,918,468,564 (€ 2,003,481,163.68). Its overall implementation is financed from the Cohesion Fund, the European Regional Development Fund, the national budget, the TEN-T budget, and loans from banks.

2 General and specific objectives and priorities of the Operational Programme "Transport" 2007-2013



The strategic part of the Programme is linked with the development of the transport sector, the sustainable growth and the competitiveness in Europe, as well as the projected increased overall demand for transport services. The Programme contributes to the primary objective of the strategic development of the transport sector in Bulgaria - the development of the European Transport Corridors throughout the country.

The strategy of the Operational Programme "Transport" is consistent with the EU strategies and policies for the development of the Trans-European Transport Network (Decision (EC) No. 1692/96 amended by Decision (EC) No. 884/2004), the policy for sustainable development in line with the Gothenburg Strategy and the Transport White Paper (2001) "time to decide" (am. 2006), and the Lisbon Strategy aiming at economic growth and reduction of unemployment.

As of 15 June 2011 a total of 57 projects were registered in the UMIS system, of which 5 were infrastructure projects. Currently, all five projects are under implementation. The infrastructure projects amounted to 96.95% of the agreed grant funding under the Programme, 95.82% of the verified costs, and 96.01% of the paid funds by 30 June 2011.

At the end of 2010, changes were initiated in the OPT, which were approved by the European Commission in November 2011, (i.e. following the cut-off date of the present Evaluation). The said changes partly reflect recommendations by the EU, and cover, *inter alia*, the following:

- Adding two new large projects to the ILPP under PA 2 and PA 1
- A reallocation of Cohesion Fund funds from Axis 2 (road transport) to Axis 1 (rail transport). The overall contribution of the Cohesion Fund to the Programme, as well as its annual allocation, remained unchanged.

In line with the above changes, the indicators and their values for the implementation of the two Sofia Metro projects, respectively under Priority Axes 1 and 3 have been updated. Indicators and their values for the other Priority Axes remained unchanged.

2 EVALUATION METHOD

As already mentioned, the evaluation covered the period from the start of the Programme until 30 June 2011.

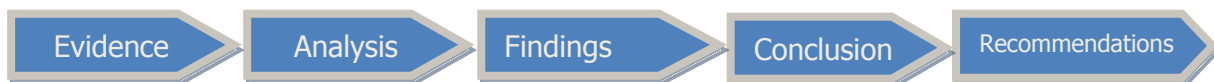
The methods used for the evaluation comprised

- documentary review (desk research);
- data collection survey, based on written questionnaires;
- oral interviews with the beneficiaries
- cause-and-effect (causal) analysis,
- multi-criteria and comparative analysis.

The evaluation followed a two-way model of analysis, including „top-to-bottom“ and „bottom-to-top“ elements. Project samples and methods were chosen in observation of the principle of proportionality.

When implementing evaluation activities, the evaluators placed emphasis on the independence and impartiality of their work. Care was taken to implement the evaluation in a spirit of openness and transparency, in partnership with all the relevant stakeholders.

The evaluation was subject to the following general logic:



The general progress of the OP was evaluated on the basis of the following benchmark, derived from international experience:

- By the end of 2015 all expenditure under the OPT must be verified and reported to Brussels. The Beneficiaries' final accounts must be submitted at least 3 to 6 months prior to the end date of the Programme.
- The implementation of major infrastructure projects takes on average 2 to 2.5 years. Therefore, the implementation of all projects to be completed by the end of 2015 should be at construction stage until mid-2013. The selection of projects takes at least 6 months. Hence, all OPT projects must be selected and approved by the end of 2012.
- Given that project costs are eligible costs as of 1st January 2007, a total of 6 years was available for contracting. 2011 is the fifth consecutive year. If the contracting rate is to be considered satisfactory, it should currently be about 5/6th of the whole, or 83%. Any lower value indicates delay.

- The required period for approval of projects (irrespective of the fact that the implementation of projects can sometimes begin before approval by the EU) should be about 3 to 6 months. In order to ensure compliance with deadlines, all projects to be implemented under the OPT 2007-2013, must be identified by mid-2012. Since in order for a project to be approved, it should actually be ready, the estimated date should be even earlier.

The following benchmark (counting backwards) was used for the evaluation of the progress of the implementation under the OPT:

- If the implementation of each project takes three years, absorption should follow contracting within a period of 36 months. Therefore, ideally, the level of payments should be about 2/6th of the total budget, or 32%. Any lower value indicates delay.

The following benchmark was used for the evaluation of the physical progress:

- The payment of costs is based on the verified actual costs for completed work, but the process of verification takes at least 2 months. Therefore, in reality, actually performed work costs more than the verified costs.
- On the other hand, the OPT provides beneficiaries with an advance of 10%, which is deducted from subsequent payments. This can, to a certain degree, compensate for the discrepancies between the acquired funds and actual physical progress.
- Considering that the absorption by the evaluation date should be about 32%, the physical progress should also be around that figure. Lower values indicate delay.

The following benchmark was used for the assessment of the impact of the initiated change in the OPT on the financial and physical progress:

The cut-off date of the evaluation is 30.06.2011, and the evaluation compares the actually reported results as of that date against a hypothetical no-change situation in view of:

- The basis of comparison should be preserved;
- Only six months have passed since the change and, as can be expected, no results were achieved for most elements in such a short period, i.e. currently, they do not have any impact effect as of the present moment, although it is expected that potential positive impact / contribution from them.
- The main influencing factor by 30 June 2011 was the Sofia Metro Project, Stage II, since it is the only project which was actually started as a result of the change and it also reported results by 30 June 2011 which can be measured. Another actual result was the reallocation of BGN 117 million (EUR 60 million) from PA 2 to PA 1.
- The change does not affect PA 3 and PA 4 because of which they were excluded from the analysis.

For each evaluation, other than the above-stated, the basis of reference is described in the respective section.

The main sources of information used in the evaluation were: the PIU and the data provided by them; the OPT beneficiaries and the data provided by them; other stakeholders and the data provided by them; other sources: OPT website; UMIS; NSI, Eurostat, TEN-T progress reports, MRDPW reports etc.

The collected information included: Operational Programme "Transport" 2007-2013 (version 2008) and the annexes thereto (from the OPT webpage), as well as the proposal for the amendment of the OPT of 2010; data from the UMIS system concerning verified, contracted, and paid funds by project and Priority Axis at the end of each calendar year and by 30 June 2011; minutes of the monthly meetings and the minutes of the meetings of the MC; reports from the spot-on-checks; approved project application forms; project progress reports; submitted project application forms; annual

reports of the OPT and the Procedure manual (version 6); interviews with the beneficiaries; questionnaire survey of the beneficiaries.

The evaluation was performed by a team of evaluators composed of: Dr. Peter Heil - Team Leader; Desislava Kovacheva - Deputy Team Leader; Raina Timcheva - Monitoring Expert; Vladislav Georgiev – Evaluation Expert; Liana Miladinova - Evaluation Expert; Dragomir Konstantinov - Expert in Programme Evaluation; Sylvia Teneva - Evaluation Expert.

3 MAIN FINDINGS

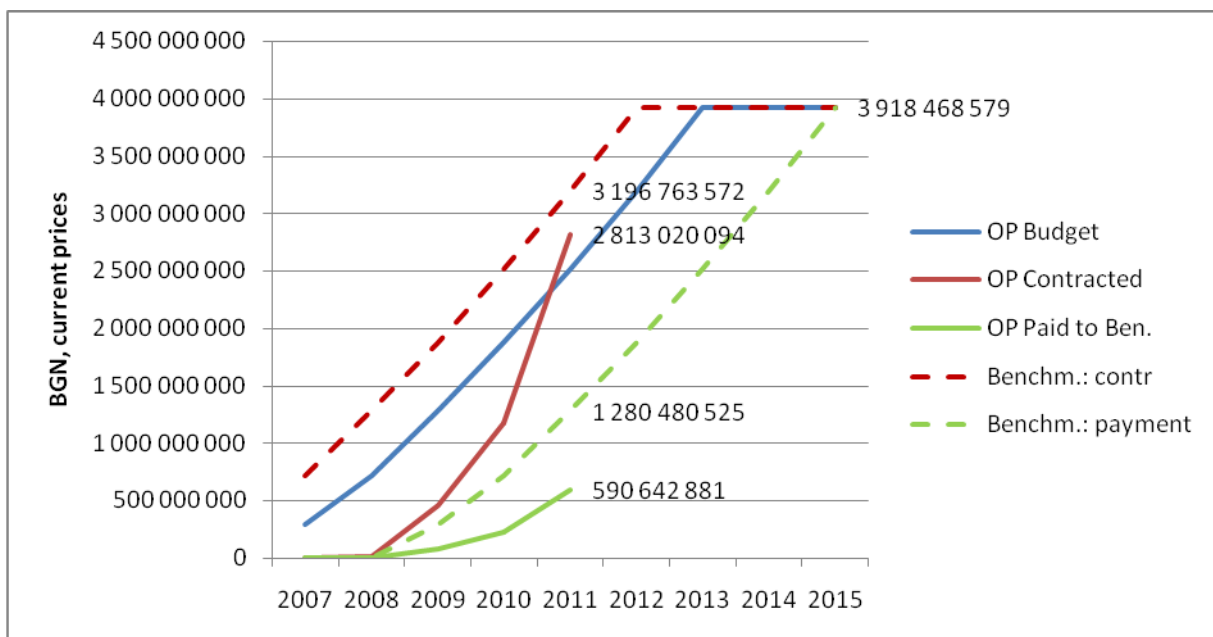
The main findings of the evaluation team, grouped by thematic areas, are presented below.

3.1 Thematic Area 1: Overall financial progress

Overall, by the end of June 2011, the programme reached a contracting rate¹ of 53,61%. The absorption rate (payments to the beneficiaries) was at 11,55%. Both of these values are below the benchmark, as described in chapter 2.

The graph below compares the contracting and payments performance of OP Transport with the benchmark described under Paragraph 3.

3 - Progress of Contracting and Payments to Beneficiaries vs. benchmark



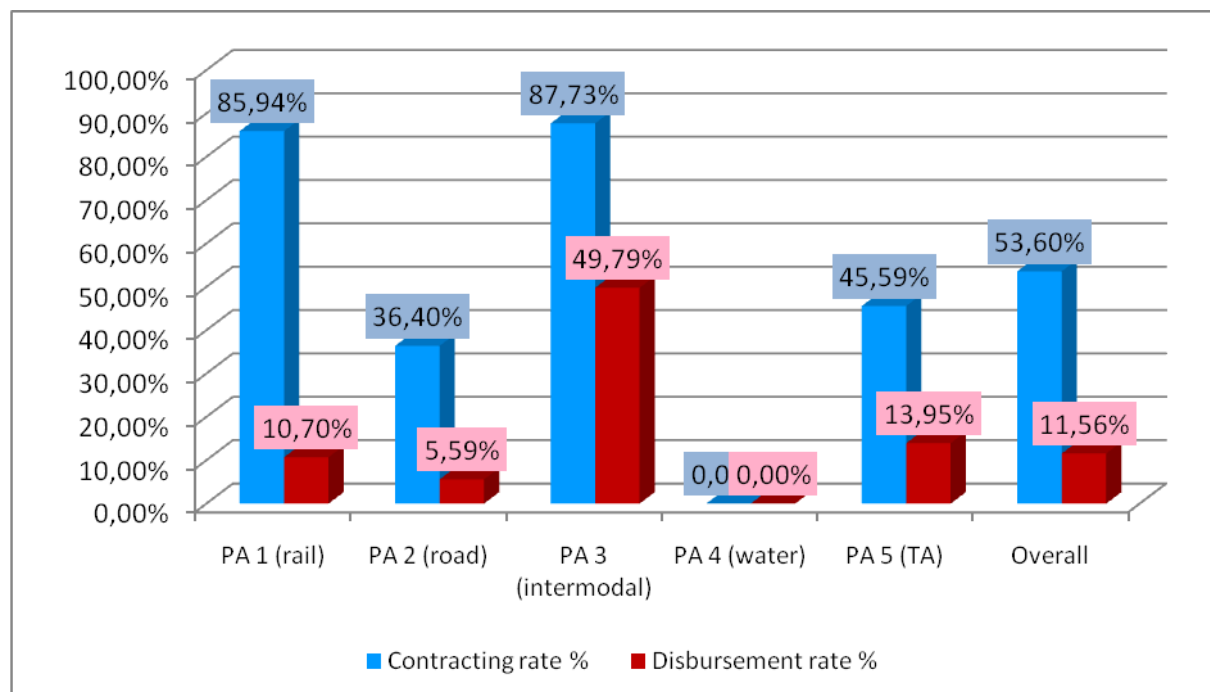
Contracting and payment figures for 2011 are estimates, based on the actual data for the first half of 2011. According to these estimates, by the end of the year, the contracting rate is expected to approach the benchmark, and absorption should be safely above the N+3 threshold.

Overall, financial progress as of 30.06.2011 had to be rated as not satisfactory. However, since 2009, there has been a steady trend of a progressively increasing absorption.

¹ Contracting rate: overall value of projects for which a grant contract between the MA and the Beneficiary has been signed.

Analysis by Priority Axis

4 - Financial Progress by Priority Axis



Figures for the individual priority axes reflect uneven progress, with PA 4 (water transport) not yet having spent any funds. Under PA 3 there is no progress with regard to multimodal freight transport. Axis 2 was also well below the benchmark in mid-2011. The progress of PA 5 is more-or-less commensurate with the time that has passed since the start of the OP, so that absorption figures for this PA do not evoke any serious concern at this stage.

Priority Axis 1 - Rail Transport: The contracting rate of the Axis by 30 June 2011 is good (satisfactory) - 86% of the initial (78% of the revised) Axis budget.

The actual implementation of the financial plan and the absorption rate are unsatisfactory - 10.70% of the initial (and 9.70% of the revised Axis budget), however there is a stable trend of progressive increase with the progress of the three infrastructure projects under the Axis.

The high co-funding rate on behalf of the beneficiaries leads to financial difficulties (especially for the NRIC), which is a threat to the physical implementation of their projects in view of the risk of delayed payments to contractors (especially in the event of funding several large projects by the NRIC).

Priority Axis 2 - Road Transport: The contracting rate of the Axis by 30 June 2011 is still unsatisfactory - 36.40% of the original (38.75% of the revised) Axis budget. The actual implementation of the financial plan and absorption rate are similarly unsatisfactory - 5.59% of the initial (5.95% of the revised) Axis budget, however there is a stable trend of progressive increase with the progress of the infrastructure project under the Axis, as well as the expected signing of grant contracts for the projects under preparation.

Priority Axis 3 - Multimodal Transport: The contracting rate for infrastructure projects by 30 June 2011 is good (87.83%), and so is the absorption rate (49.79%). However there is a risk of that no intermodal freight transport project can be implemented. This involves the risk of loss of funds, in parallel to the threat of OP Transport being unable to deliver an important part of its foreseen impact.

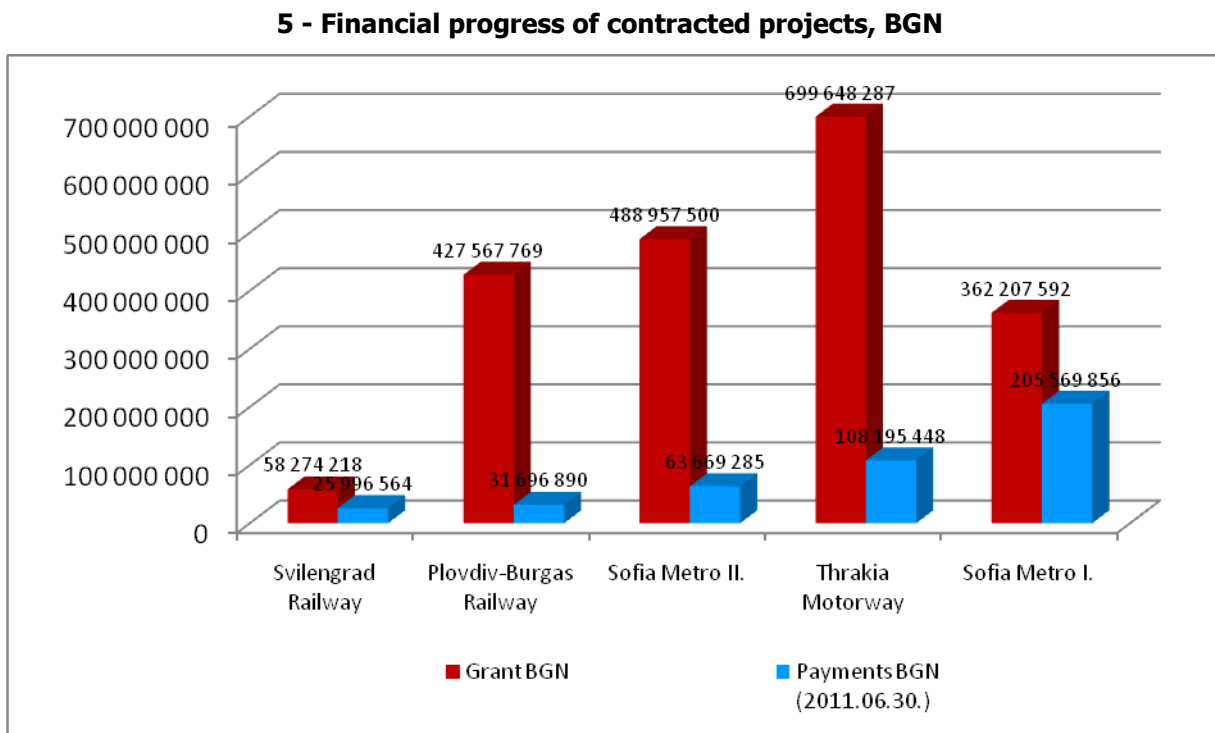
Priority Axis 4 - Water Transport: By 30 June 2011 the contracting and absorption rates of the Axis are zero. It is also expected that the large project originally put on the indicative list of priority projects will not be implemented in the current programming period. At the same time, there is no alternative big project mature enough to replace it. Therefore there is a serious risk of a significant loss of funds and a threat of failure to achieve a significant part of the planned impact of the

Programme resulting from the lack of signed contracts under the Axis². It should be noted that another grant contract (from the Indicative List for this Priority Axis) is expected to be signed as of the time of the evaluation.

Priority Axis 5 - Technical Assistance: The contracting (45.59%) rate is proportionate to the time passed since the programme start, while payments (absorption) are relatively low (13.95%). Recently, the speed of absorption rates has been decreasing because of the many projects which have already been completed, and the lack of absorption under the new projects. However, in just the first half of 2011 six new grant contracts were signed. This is expected to increase the absorption rate during the coming months.

Analysis at Project level

The **financial progress** of the five projects contracted as of 30.06.2011 is shown on the next graph:



3.2 Thematic Area 2: Identification of obstacles and problems to the absorption of the funds of the OPT

During the evaluation, most beneficiaries reported similar problems in the utilization of Programme funds, namely:

- **Lack of sufficient financial resources (cash-flow, co-financing and VAT pre-financing problems)** – This problem is particularly typical for the beneficiaries for whom VAT is non-reimbursable. At the beginning of OPT, the EC transferred 10% advance payment to the state budget with the specific purpose of providing sufficient liquidity for the Programme implementation. Furthermore, the implementation of all OPT projects generates significant tax revenue for the state budget, which is higher than the national co-financing (18.92%) of the OP. Using the full amount of the advance payment for the projects should solve the problem.

² As of the date of the preparation of this Executive Summary and the submission of the Evaluation Report, the contract was signed and the project is currently under implementation. However, in order to preserve the basis of comparison (30 June 2011), it was excluded from the analyses.

- **Lack of experience and capacity in the management of infrastructure projects** - In order to improve the spending of funds, the team recommended continuation of the strengthening of the administrative capacity of the beneficiaries through training of current staff and hiring external experts. The introduction of a performance-based payment system should also be considered.
- **Staffing issues** - this problem is mostly connected with the management of the human resources, which could be improved through the measures described above.
- **Problems with procedures in accordance with the PPL, securing of building permits, expropriation procedures, EIA and archaeological studies** – in order to mitigate these issues, it is necessary to review the relevant legal framework for possibilities for including fast-track procedures for the administration of EU-funded projects by the licensing authorities and courts. A significant positive effect could be achieved even within the current period provided that the responsible ministries are ready to take a concerted effort. Of course, such developments would benefit the other Operational Programmes as well and would have quite a widespread positive impact.
- **Progress reports** - On the one hand it is good to periodically review not only the progress reports, but all the reporting forms in order to continuously improve their efficiency and facilitate their completion. On the other hand, the MA could develop a manual for the beneficiaries, which would benefit both the beneficiaries and the MA. It would enable the MA and the beneficiaries to organize and participate in more trainings in other relevant areas, while at the same time partially addressing some of the consequences associated with the staffing problem and the lack of continuity. Optimizing the existing IT tools or developing new ones could also be considered in order to facilitate the project management and reporting by the beneficiaries. This will further improve the Programme monitoring and the measuring of the progress at indicator level (which at this stage is not yet satisfactory).

Further identified issues related to the implementation process are as follows:

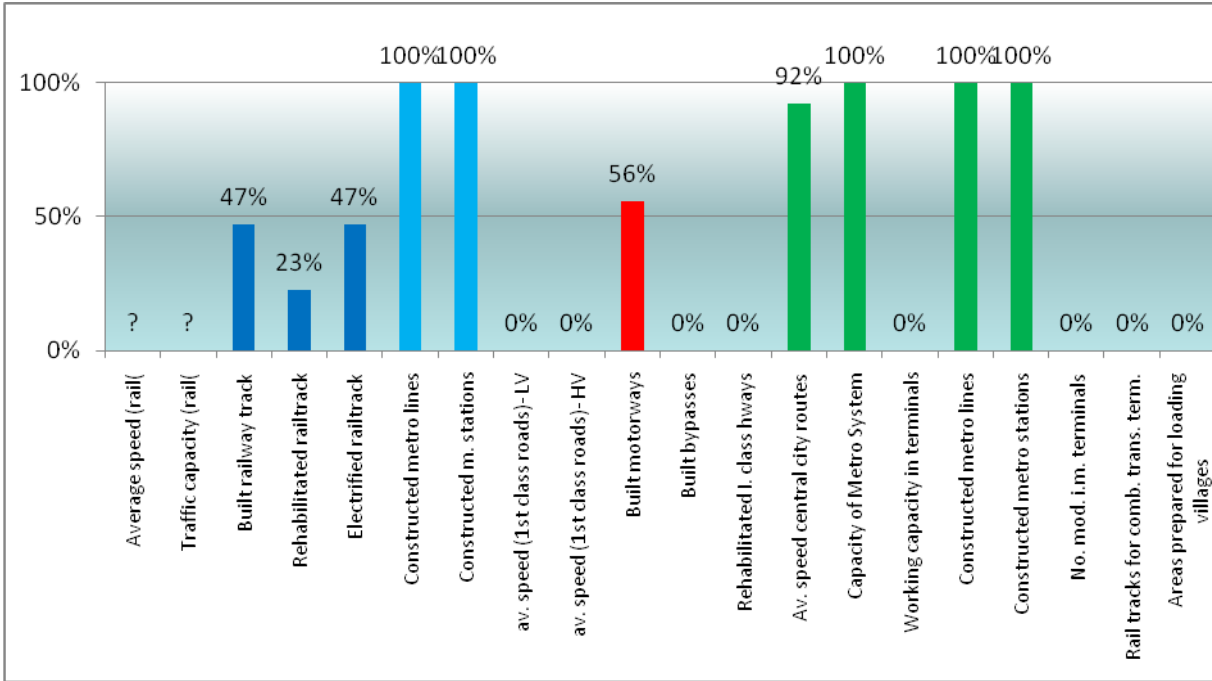
- **Delayed start of infrastructure projects under the Program** - This problem can no longer be solved, but it is desirable that the lessons learned from own experience and the ISPA experience be remembered in order to prevent the possible late start of the next programming period;
- **Unforeseen work and expenses during the performance** - Due to the nature of the project, it is almost certain that there will be such work and expenditure in the future. What is more important is that these budget lines be considered as early as the planning stage and potential measures and funding be discovered. But it should also be noted that there is a parallel trend of savings and price reductions of contractors due to the increased competition resulting from the economic crisis;
- **Optimisation of the supporting tools for the planning, reporting and monitoring of the implementation of the Programme (IAWP, UMIS, archive, indicators)** - Most of these tools in addition to their main purpose - to manage and monitor the implementation of the Programme and projects - could serve as indicators/early warning signals. For this purpose it is necessary to optimize/develop them further, after which the information from them should be periodically analyzed.

3.3 Thematic Area 3: Identification of obstacles and problems in the absorption of OPT funds

Not all OPT indicators are SMART, but all of the indicators are linked to the projects under implementation. However, compared with the original indicators at priority axis level and the benchmarking described in chapter 2 the progress of OP Transport has to be seen as unsatisfactory. For many of the indicators no data (actual values) were available.

The following graph shows an estimation of what percentage of the originally foreseen results of OP Transport³ could be expected to be attained, under the assumption that the projects already contracted before 30.06.2011 are fully implemented.

6 - Expected rate of achievement of OP indicators through the implementation of the projects contracted by 30.06.2011.



Physical progress under Priority Axis 1: The overall physical progress under this Axis by 30 June 2011 against the originally specified indicators for achievement is not satisfactory, however measures have been taken to offset the delay through the replacement of projects from the Indicative List with Priority Projects with project from the Alternative List and new projects consistent with the objectives of the Priority Axis and at advanced stage of preparation. New indicators were added to the Axis, which correspond to the newly-added (in line with the change of the OPT) Sofia Metro Project, Stage II, however the target values of the remaining indicators were not updated. As a result, a clear tendency of progressive growth in the physical progress can be identified, which is mostly due to the metro project.

Physical progress under Priority Axis 2: The physical progress by 30 June 2011 in accordance with the Axis indicators is zero; however, there is evidence of a stable and progressive physical progress in the remaining period of the Programme. Corrective measures have been taken to offset the delay through intensive preparation and contracting of all projects of the ILPP and redirecting of funds to Priority Axis 1.

Physical progress under Priority Axis 3: The current physical progress against the initially specified Axis indicators is not satisfactory; however there is evidence of a stable and progressive physical progress towards the completion of the infrastructure project for the expansion of the Sofia Metro: Stage I. As of 30 June 2011 there was no other infrastructure project under the Axis. If all objectives of the Axis are to be achieved, it is desirable to attempt to sign and commence an intermodal grant contract under the Axis.

Physical progress under Priority Axis 4: In the absence of contracting, the absorption rate of this Axis is zero, which will change after the expected signing of a grant contract for the project "Establishment of a River Information System in the Bulgarian Part of the Danube River – BULRIS". This is crucial given that this Axis is the only one which could contribute to the water transport, which, in turn, is the least advancing mode since no investment has been put into it in recent years.

³ Output and result indicators for PA 4 were excluded from the graph as no grant contracts were signed under it by 30 June 2011.

Physical progress under Priority Axis 5: This Axis amounts to just slightly over 3% of the Programme budget. The contribution of Axis 5 to the physical progress of the OPT is indirect, as it only contains soft measures. At the same time, its importance for the preparation of infrastructure projects – a major source of delays and underperformance so far – should not be underestimated as it was exactly the lack of mature projects in the beginning of the Programme that was the main cause of delays and the current unsatisfactory implementation.

The factors, identified in Chapter 2, which influence the physical implementation of the Programme were analyzed and prioritized based on the criteria of **importance** and **urgency** (taking into account the impact on the achievement of the Programme objectives and the impact on the absorption rate of the Programme) and the **feasibility of applying corrective/preventive actions** to minimise negative effects.

On the basis of these criteria, the following high-priority issues to be addressed were categorized (it should be noted that the addressing of some of them will assist not only the current and the next programming period, but would also have a wider impact, incl. on other Operational Programmes):

- Delayed start of the infrastructure projects under the Programme;
- Lack of sufficient financial resources
- Institutional and organizational issues;
- Issues with procedures in accordance with the PPL, securing of building permits, expropriation procedures, EIA and archaeological studies;
- Progress reports;
- Unforeseen work and expenses during the implementation;
- Issues with non-reimbursable VAT;
- Lack of experience and capacity in the management of infrastructure projects;
- Issues with HR management;
- Optimisation of the main tools supporting the MA in the planning, reporting and monitoring of the Programme implementation do not function adequately (IAWP, UMIS, archive, indicators).

Further information on the above is included in Chapter 2.

In addition, the following potential risk factors were identified, which if not addressed properly and promptly, are likely to hinder the further implementation of the programme. These are:

- risk that some infrastructure projects with a deadline for implementation 2014-2015 will realize the delay;
- Risk of failure to implement the original internal plan by priority axes.

Due to a delayed start, many projects are expected to finish in 2015. This coincides not only with the end of the Programme, but also with the next programming period, because of which it is highly likely that the beneficiaries will be very busy, and a small error could have adverse effects. To prevent the risk of potential delay of any project, we recommend that the MA enhance the monitoring of these projects, as well as support and communication with the beneficiaries and carry out more frequent spot-on checks of the higher-risk projects, as long as this is appropriate and does not disturb the schedule of the project implementation.

The risk of failure to implement the original internal plan by Priority Axis is linked to the fact that currently there are no inland waterway transport and multimodal freight projects under the OPT. The current focus is on railways, roads and of course - the metro. As far as the metro and rail transport are alternative transport modes, while road and railway transport are TEN-T, there is no non-compliance with the general objectives of the Programme. However, given that just for inland

waterways and multimodal transport there are two of a total of four Priority Axes, funded solely from the ERDF, the lack of projects under two of the three project areas is a threat to the achievement of the expected wider impact the Programme. It is therefore advisable that the MA stays focused on securing such projects.

In addition, the evaluators identified the risk of potential lack of sufficiently mature projects for funding in the beginning of the next programming period due to a depletion of the Programme funds. The evaluators recommend to the MA and the beneficiaries to also consider this risk even though it is not among OPT 2007-2013 goals. It is advisable to allocate funds of the national budget to such projects, naturally this should depend on the presence of political will on behalf of the responsible Ministry.

3.4 Thematic Area 4: Analysis of the development of the External Programme Environment

Overall, the **external programme environment** is characterised by a marked deterioration of the economic outlook, as a result of the global financial and economic crisis of 2008. Recent figures indicate a slight improvement of the economy, in spite of the recently occurred macrolevel problems in the EU.

According to the NSI and Eurostat data, since 2008 there has been some decline in both the numbers of transported passengers and goods, where the tendency is typical for all transport modes, but is more pronounced in domestic shipments. The share of road transport is still very dominant, and since 2000 its share in Bulgaria has risen from 60% to 75% and continues to increase, but it is still below the EU average. It is worth noting however, that in the more developed EU countries the upward trend in the share of road transport has undergone a reversal, and there has been a reduction in the share of road transport (cars and buses) at the expense of the greener rail transport mode. With regard to freight transport, however, both in Bulgaria and the EU, the increase of the share of road transport at the expense of railway transport continues. As for Bulgaria in 2009, Eurostat data show that the share of road freight transport follows the trend for passenger transport, however, the share of rail freight transport is dramatically reduced to 12% (from 45% in 2000), and there is more pronounced increase in the share of internal water transport of freight - 21% in 2009 (compared to 3% in 2000, and 13% in 2008). Furthermore, the energy consumption of the road transport in Bulgaria is above the EU average, while the share of road transport is still lower. This is probably due to the older vehicle fleet in Bulgaria and its growing share. Congestion further increases energy consumption by the road transport.

In spite of this, there has been no reversal of trends in Bulgaria for the last 10 years and they affect all modes of transport more or less equally. Beyond the OPT there are minor investments in the transport infrastructure, mainly related to partial rehabilitation of the most problematic areas of the transport network, with focus on road transport. Overall, the technical condition of the transport infrastructure, with the exception of the Sofia Metro and some sections of the road network, has not changed. The need for significant investments in the sector to compensate for the accumulated problems due to lack of sufficient investment in it over the last 15-20 years is also as sharp as it was during the preparation of the SWOT analysis of the OPT.

Indeed, if the government is able to provide the necessary amounts for co-financing, and the management issues laid out in the evaluation report can be tackled at a satisfactory level, the OPT can play the role of one of the most important anti-crisis instruments available to Bulgaria, offering the perspective of additional demand for Bulgaria's construction industry in the context of an overall recession.

In short, the trends in the external environment have not changed the overall situation of the transport sector in Bulgaria, nor the identified needs during the preparation of the OPT. Also, the long-term prospects of the sector remain unchanged.

Indeed, if the government manages to secure the necessary funding and if satisfactory solutions are found for the management issues identified in the evaluation report, the OPT could play the role of one of the most important anti-crisis tools for Bulgaria, offering the prospect of further market demand for Bulgaria's development in the context of overall recession.

As a result, the situation **analysis and strategy of OP Transport** can still be regarded as up-to-date/relevant.

The evaluators also concluded that there had not been significant qualitative changes with regard to **EU or national level transport policies** since the beginning of the Programme. On the contrary – an additional emphasis on promoting green transport (new TEN-T) is observed. All needs and requirements of the national transport system, established as early as the period of the Programme preparation, are still valid. The national needs for efficient and modern transport services are even more acute compared to 2007 in view of the poor economic and demographic situation in the country since they create possibilities for improving the competitiveness.

Accordingly, the **requirements towards the management of OPT** are the same as in 2007. Given the delayed progress of the water transport and the multimodal freight transport so far, more consistent effort is needed during the further implementation of the OPT to align these two modes with the General Transport Mater Plan.

The financial crisis, of course, seriously constrains the national budgets, and also the financial situation of the beneficiary agencies of the OP on Transport. Nevertheless, the average 10% advance payment of the EU to the national budget should provide appropriate financial resources to the Bulgarian government to ensure the liquidity of OP Transport. In the wake of the current crisis, the significance of using these advances to the full is even more important than it was at the beginning of the programme.

3.5 Thematic Area 5 Progress in the implementation of the objectives of the OPT and of the wider impact of the Programme

The strategic goal of the OPT is to develop a sustainable transport system that is set to be achieved through road and railway infrastructure, which is the basis for integration of the Bulgarian transport system into the European (rail and road TEN-T projects) and construction of transport infrastructure conditions for improving the balance between modes of transport. As stated in the previous section, despite the global economic crisis and the changes of government in Bulgaria that have occurred since the beginning of the programme, **the goals of the OPT are current** as the SWOT analysis and the general transport policies are still valid and the needs – even sharper, while no significant change in the long-term strategic goals for development of the country is present.

There is **good overall strategic co-ordination of OPT**, and consistency of priorities under the OPT with formulated project categories in the General Transport Master Plan is also **good**.

In March 2011 the European Commission adopted a comprehensive strategy ("Transport 2050") for competitive transport system that will increase mobility, will remove the main obstacles in key areas and will contribute to growth and employment. At the same time the proposals aim at decreasing drastically Europe's dependence on oil imports, and fall of greenhouse gas emissions from transport by 60% by 2050.

In the autumn of 2011 Strategy "Transport 2050" was supported by the White Book, which presents a roadmap that includes 40 specific pan-European initiatives for the realization of goals. Roadmap "Transport 2050" and annexes thereto are launching also the concept of core network of the European transport and therefore are making detailed recommendations for territorial development of modes of transport in all European regions and Member States, including Bulgaria.

It should be noted that the above new European priorities for transport infrastructure do not repeal the previously existing ones. In this respect, the current goals and selection of approved proposals under the OPT are also **in accordance with these new priorities**. The new European documents are building on the existing ones, requiring certain additional efforts by Member States in the listed thematic and regional accents.

In terms of horizontal policies coherence is also observed. **Sustainable development policy** is strongly embedded in the programme itself and finds expression even in the evaluation criteria for funding projects under the OPT. In all projects funded so far under OPT relevant elements of this policy are set out (e.g. "green infrastructure" - approaches to the crossing of species, silencing equipment, tunnels and eco-ducts, noise screens, etc.). In addition priority is given to sustainable

transport (train and metro) and to projects contributing to reducing congestion and energy consumption, thus address not only the requirements of EU and national strategic documents, but also some of the most problematic "spots" of transport, which after the implementation of projects under the OPT should report on actual results. It is recommended that this policy be maintained and further developed as far as economically and socially vibrant, in future transportation projects as well.

In general, the international traffic is the one that sets the direction for the development of an economy which for a relatively small country like Bulgaria, which is heavily dependent on international shipments rather than on the internal, is essential. Bulgaria's geographical position provides opportunities for building a competitive and comparative advantage of the country to attract transit traffic. The development of this potential is of great importance for the country's economy. The relatively well-developed road and rail national networks contribute to it, but their true value can be felt only after their rehabilitation, modernization and completion – in terms of infrastructure and technology. On the other hand, lack of "openness" of the road network in the west / northwest, the border status of the Danube, and its still very little use as an inland waterway, and the relatively peripheral role of the Black Sea in Europe's transcontinental shipments are challenges that must be overcome to enable the national transport network to become a truly competitive system of complementary transport networks and services, integrated into a Europe-wide transport network. Under the new TEN-T by 2030 a fully functioning and covering all major EU transport network of TEN-T corridors should be built, and by 2050 high network capacity and the corresponding set of information services is to be ensured. For this purpose, no later than 2030, all sections of the national transport network must be physically built and put into operation. Special attention should be paid to the effectiveness of all border crossings (border checkpoints), which are an integral part of the corridor, given the peripheral location of Bulgaria, which requires constant coordination with the ministries responsible for this. By 2010 only 5 of the 30 international corridors of the European transport network are fully developed physically. None of them, however, passes or even comes close to the territory of our country. The five international transport corridors passing through Bulgaria are shown in **Figure 7**. The total length of the national road network of the TEN-T is 2013 km⁴, while for the railway network - the total length is 2377 km and for the Danube it is 470 km.

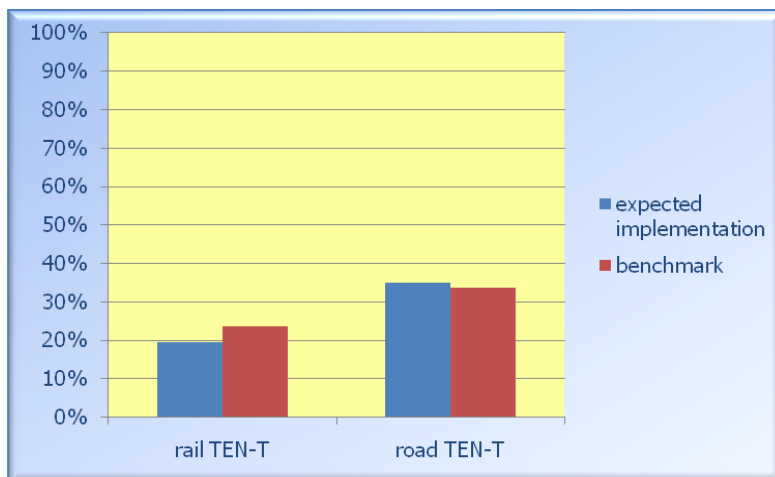
Figure 7 – International corridors on the territory of Bulgaria



⁴ Final evaluation of the Cohesion policy 2000-2006 interventions funded by the Cohesion Fund (incl. ISPA)

It is too early to talk about developments in the **integration of the national transport system with the European transport network** having in mind that pan-European corridors themselves at European level are far from being physically completed. Of contribution to effective integration into a unified, competitive European transport network we could talk only after having the backbone of this network - the transport network physically built. However, given that the TEN-T corridors are developed on the basis of the existing transport links and system, though largely failing to correspond to modern technology and the current market needs in Bulgaria, there are 18%⁵ length of the roads and 5% of the railway length of corridors that meet the requirements of the TEN-T. But after the construction of the current projects implemented with a focus on OPT TEN-T, construction will reach 35% of the total length of road and 20% for rail corridors. These accounts do not include new areas of advanced TEN-T. Based on benchmarking (described in Chapter 2, in which case the base used is the deadline for TEN-T - 2030) it can be concluded that in terms of roads progress is very good, while in terms of railway there is still a significant lag. But thanks to the significant contribution of OPT in this area, progress in construction of railway network is increasing progressively. For completion of the remaining sections of the national transport network TEN-T there remain another 16 years⁶. In consideration of the nature of projects and what has been built under TEN-T since 2007, this period may be challenging.

Figure 8. Expected degree of completion of the TEN-T network in Bulgaria after the completion of projects under OPT to the ILPP:



Evaluators roughly estimated that in order for the entire transport infrastructure of international corridors in Bulgaria (new expanded sections of TEN-T are not included in the calculations) to be built what will be needed is about EUR 7⁷ billion BGN for rail and much more for road infrastructure. To these if the funds necessary to complete the link and the river corridor in Bulgaria are added, the required funds will exceed 15 billion BGN, which will also have to be

contracted no later than the end of 2027⁸. And that does not include funds needed for new areas of advanced TEN-T. Adding new and more stringent requirements under the new TEN-T, mainly related to expansion of the network in order to meet these temporary needs, and avoid the bad lessons of delays from ISPA contributing in part to delays in the start of OPT 2007-2013, it is recommended that the preparation of projects for the next programming period should begin immediately. On the other hand, given the upcoming volume of projects and project work, evaluators advise MA of OPT to consider outsourcing activities related to management of project implementation to a specialized external unit.

One of the recommendations of the TEN-T is to invest as priority in the narrowest and busiest⁹ sections of international corridors, by first addressing the most problematic areas to reduce congestion

⁵ The degree of completion both of the road and railway network is calculated based on the length of sections of the network built as of 30.06.2011.

⁶ Until 2030 there are still 19 years, but recent projects which have to be completed by the end of 2030, should reach the "construction" stage no later than mid-2028 (Benchmarking-Chapter 2). Therefore, the deadline for the preparation of these projects is the end of 2027, which means that there are still 16 years left.

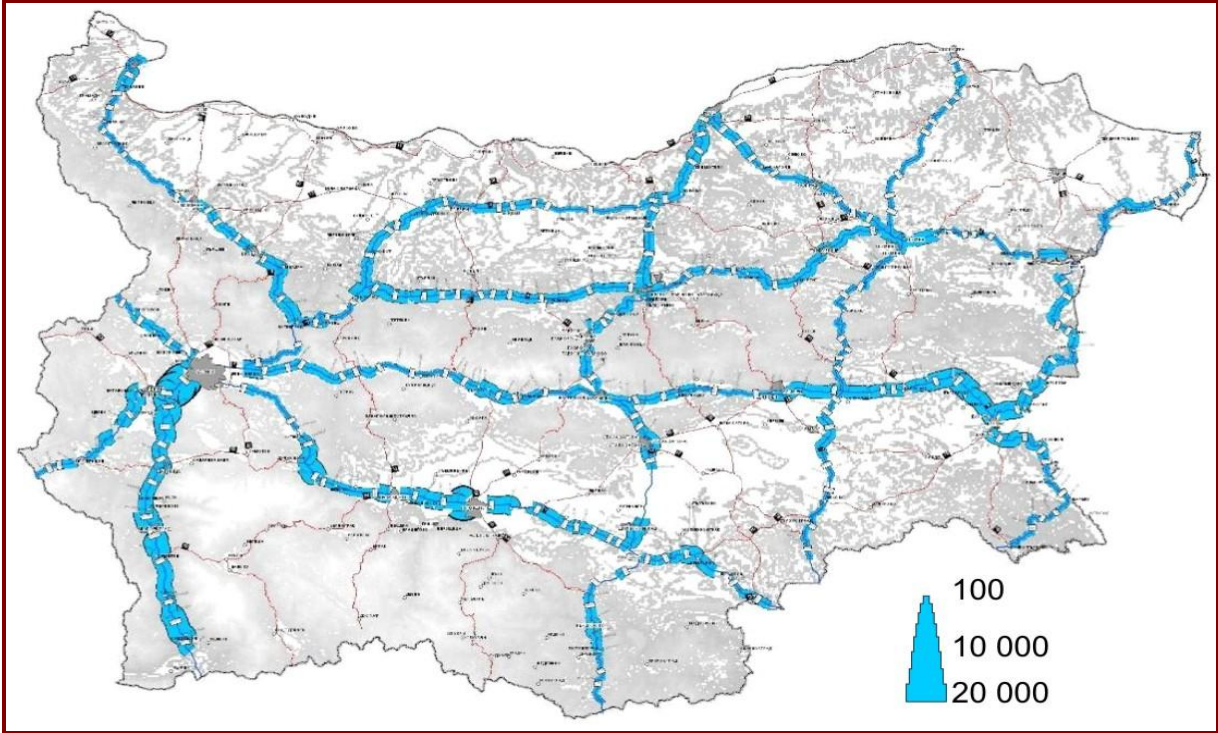
⁷ Based on unit cost per km of railway (for roads), calculated on the basis of budgeted funds for railway and road projects in TEN-T OPT 2007-2013.

⁸ On average the construction of such a project takes about 2-2.5 years, and adding the term associated with tendering procedures, the total time is at least 3 years. See Chapter 2 for more information.

⁹ Since there is no data and studies on the workload of the road network, evaluators rely on the map of the MRDPW for the intensity of the road traffic. Given that the intensity of traffic is the main indicator of workload in a network, evaluators agree for the purposes of the evaluation that where there is intense traffic, there is also load there, and vice versa

and the resulting serious injury-related accidents and casualties, the increased environmental pollution, delays of passengers and cargo, etc. This would have the most rapid positive effect of the selected projects both on social and economic development of the affected persons and sectors and on the environment. Given that road transport has a strong dominant share with a trend of further growing, while the share of other modes is significantly lower and continues to decline, and the lack of data and studies of different types of load transport infrastructure in Bulgaria, evaluators agree that under load of transport infrastructure is meant load of road infrastructure. Moreover, it is consistent with European strategic documents in the field of transport. Comparing with a naked eye the maps of Figure 1 and Figure 9 shows that the MA of OPT and beneficiaries fully adhere to this recommendation. Evaluators estimated that this way about 72%¹⁰ of the busiest stretches of roads in Bulgaria are addressed, which is expected to contribute after the implementation of projects to eliminating most of the bottlenecks and major bottlenecks in thoroughfares of the country. For example, only one area covering about 20%¹¹ of the total length of the busiest road sections, and sitting as an alternative to two projects financed by OPT, the contribution of only one of two projects (Trakia motorway) is expected to lead to 4 times (or 75%¹²) reduction in its workload. However, reducing the workload is an effect of the achievements of the projects. Therefore it can only be reported after putting the projects in operation.

Figure 9. Average daily traffic intensity per year



Over the past 20 years, insufficient funds are invested in transport infrastructure, and greater investment priority as a whole was given to road transport, leading to further deterioration of the railway technical network and to underdeveloped inland water transport. Proof of this is the results of the construction of TEN-T road-, rail and water corridors. Although in recent years there has been a tendency for redirecting more and more investment in alternative transport modes (metro, rail, multimodal terminals), investment is still insufficient, while in inland water transport such practice is actually missing. At present, out of a total of five projects that have grant contracts, 4 are alternative modes of transport.

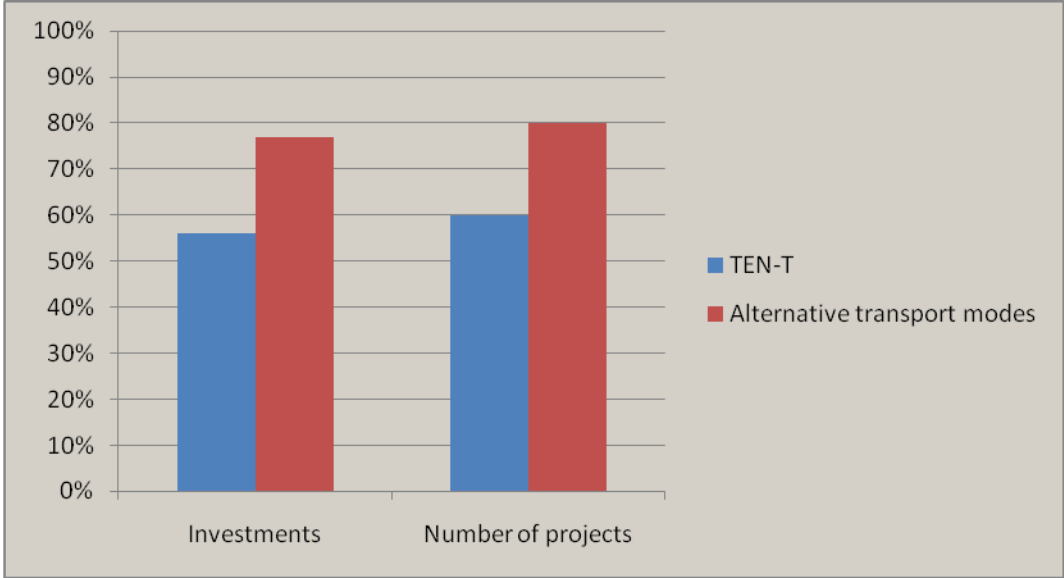
Years ago, the priority in investing in road transport was essential because of progressively increasing needs and demand for this type of transport. Only in the last 10 years its share has increased considerably (see Chapter 3.4), which is due on the one hand to the advantages associated with the

¹⁰ Calculated based on the length of the busiest sections of the map - the busiest areas are along Lot 2,3 and 4 of Trakia motorway, along the Struma motorway and Maritsa motorway, Kardjali, Podkova, Vratsa-Botevgrad and Ihtiman-Plovdiv.
¹¹ Calculated as described above.
¹² Source: AF of Trakia Motorway

possibility of greater flexibility and mobility, provided to passenger and the ever-growing need for timely and flexible supply of goods following the business demand and on the other to a fast growing economy and labor market in Bulgaria from the late 90s until the beginning of the global economic crisis. But in addition, progressively increasing are damages arising from mass transfer of passengers and freight to road transport - congestion, accidents, pollution, delays in deliveries. Therefore, investment in alternative modes of transport in search of optimal solutions to existing problems in the transport network is becoming a more apparent priority of the new TEN-T. However, the railway and modal and inland waterway transport alike have yet to catch up a lot, given that for years they were left in the background.

As of 30.06.2011 besides funding in integration with transport corridors, the OPT had made significant investments in terms of the so-called "Green projects" (train and metro) designed to contribute to improving the **balance between modes of transport**. See Figure 10. In addition, the transfer of 117 million euro (60 million Euro) or 6.5% of the budget from Axis 2 to Axis 1, leads to diverting these funds from road transport to the rail alternative, which is another positive measure targeted at supporting alternative, backward modes of transport. But due to the fact that all these projects are still under construction, it is too early to speak about their achievements towards improving the balance between modes. Moreover, multimodal transport and inland waterways, at the time of assessment are still lacking grant contracts. But it should be noted once again that such a contract is expected to be signed any time in the sector of inland waterway, and the MA of OPT, together with the beneficiary NRIC, are working very hard to replace the multi-modal freight terminal project laid down in the indicative list of priority projects with another more mature project, for whose implementation there is still enough time and budget¹³. Given the importance of these projects (as a whole, these are the areas lagging behind in the transport of Bulgaria), while at the same time ensuring fund absorption under PA 3 and PA 4, the evaluators believe that the effort will lead to a result. However, we should emphasize on the contribution of the OPT to support the revival of the alternative modes of transport – the major investments made in Bulgaria so far and outside the OPT are focusing primarily on road transport as a lesser priority is given to alternative modes of transport which is also evident from the results of the levels reached in construction TEN-T projects outside the OPT.

Figure 10. Allocation¹⁴ of investments and the number of projects as of 30.06 2011 by OPT goals.



¹³ This kind of projects are usually not so capital intensive and are built faster than road infrastructure.

¹⁴ The sum of these percentages with the percentages allocated to TEN-T exceeds 100% due to the fact that rail transport projects supported by the Programme, according to the programme objectives simultaneously fall in both categories.

Although the strategic goal of the OPT is to develop **sustainable transport system**, a definition of a sustainable transport system in the program was not prescribed, but the term "sustainable" has become very largely applied which allows for a very broad interpretation.

One such definition, from the European Union Council of Ministers of Transport, defines a sustainable transportation system as one that:

- Allows the basic access and development needs of individuals, companies and society to be met safely and in a manner consistent with human and ecosystem health, and promotes equity within and between successive generations.
- Is affordable, operates fairly and efficiently, offers a choice of transport modes, and supports a competitive economy, as well as balanced regional development.
- Limits emissions and waste within the planet's ability to absorb them, uses renewable resources at or below their rates of generation, and uses non-renewable resources at or below the rates of development of renewable substitutes, while minimizing the impact on the use of land and the generation of noise.

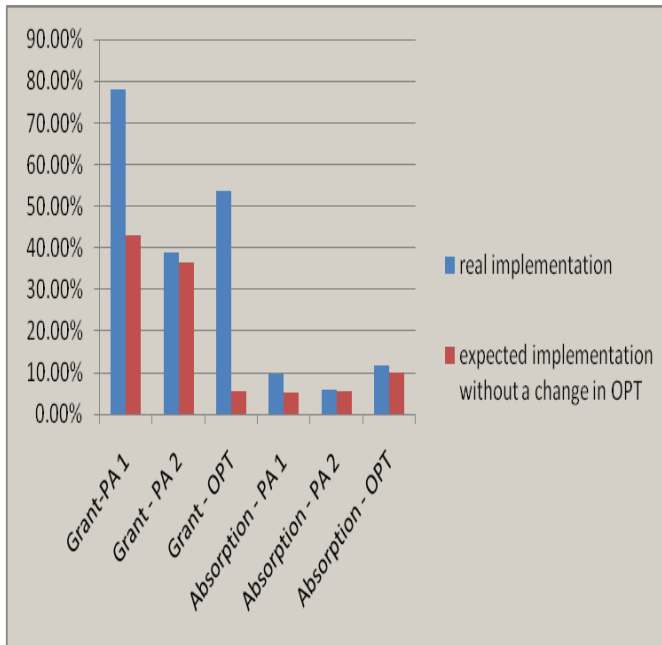
For the purposes of evaluation, evaluators refer to this definition as a reference base. Everything said so far in this chapter shows that both sub-goals of the programme contribute to most to the components described in the definition of a sustainable transport system, and it is not necessary, and is almost impossible even to contribute to all of them simultaneously. First, through investment in TEN-T the backbone of the international corridors is built aimed at supporting the development of competitive and environmentally friendly unified European system, promoting open access and equality of citizens. Second, through investments aimed at supporting alternative modes of transport, it is aimed to develop these modes so as to be able to offer choices for passengers and businesses. Thirdly, all projects under the OPT observe the requirements of sustainable and environmental policy. Fourth, as stated at the beginning of this chapter, the main objective of the program is expected to be met through the implementation of its two sub-goals. **So the performance of each of the sub-goals of the programme is expected to contribute to the development of a sustainable transport system**, but to date, this is only in theory. Until there are projects constructed and placed in service, the contribution of the OPT to develop a sustainable transport system cannot be recorded properly.

Moreover, to overcome the accumulated delays in projects and the low rates of absorption characteristic of the early years of the programme and holding risk for not accomplishing the goals, the MA of OPT at the end of 2010 initiated a modification in the OPT. Timely and adequately addressing the identified risk factors, the proposed by the MA of OPT modification aims at ensuring the continued implementation of the programme, while reflecting at the same time the recommendations of the Commission, giving priority to projects in the first phase of implementation / project readiness and proceed to the so-called "Overbooking", especially for those with delay in the absorption of the Cohesion Fund funds.

The impact of the modification is studied in the financial, physical and strategic progress as the reference basis is described in Chapter 2.

As regards the **financial progress as of 30.06.2011** the impact of the Programme modification is presented in the graph below:

Figure 11. Impact of the OPT modification on the financial progress as of 30.06.2011



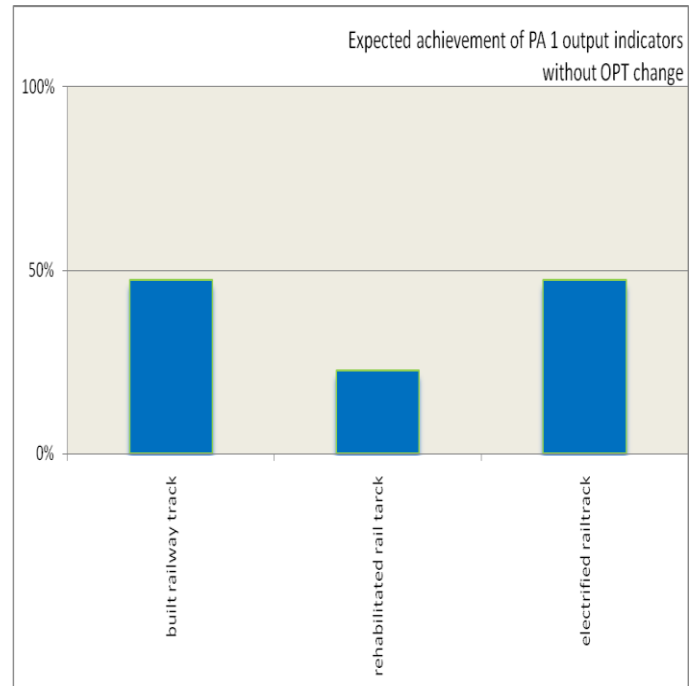
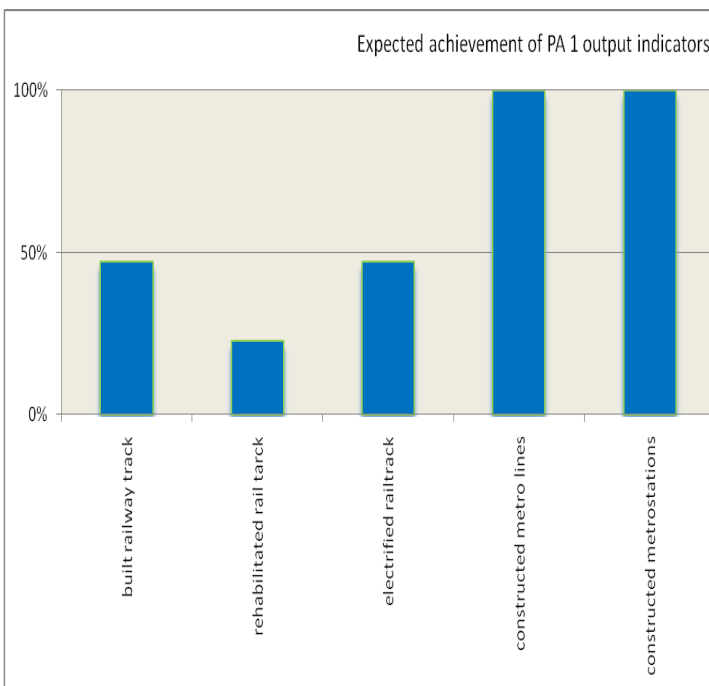
The degree of contracting under PA 1 only for 6 months has risen from unsatisfactory to satisfactory, which is due to the Metro project stage II and redirection of 117 million euro (60 million Euro) from PA 2 to PA 1. **The change has had a rapid and strong positive effect on the financial progress of PA 1, a weak positive effect on PA2 and the Programme as a whole.** The positive impact of change on the entire programme is lower, because it is impacted also by the financial progress achieved under PA 3 and PA4, as described in Chapter 3 – under PA4 there no progress whatsoever as of 30.06.2011¹⁵.

As regards **physical progress**, change only affects the programme in PA 1. The figure on the left below presents the expected performance by indicators for achievement under PA 1, resulting from the

actual grant contracts concluded by 30.06.2011 (after the modification), while the figure on the right presents the same, but without the modification in the OPT.

Figure 12. Impact of the OPT modification on the physical progress as of 30.06.2011

Due to the change in the program, under PA 1 it is expected that both newly added output indicators of



will be fully met. In the other three output indicators of the axis there will be no change due to the projects funded under OPT as of 30.06.2011 which have not been included in the modification and due also to the fact that the target values of these indicators have not been updated. **The change in**

¹⁵ PA 3 and PA 4 are excluded from Figure 11, since they are not affected by the OPT modification.

the short run has a strong positive influence on the physical progress only under PA 1, and as a result a positive effect is expected on the physical performance of the entire programme, although at programme level, the positive impact is less because of the offsetting effect of the lack of progress on projects under PA2 and PA4 as of 30.06.2011.

The expected impact of the OPT modification on the implementation of the Project goals is summarized below:

- **In relation to the integration of the national transport system with the European transport network**

Of all the aspects addressed by the change in the OPT, only the metro project, Stage II would have an impact on this sub-goal as of 30.06.2011 since there are no results yet in the remaining elements of the modification. But as the project is not part of the TEN-T it is not expected to directly influence the implementation of this goal. On the other hand, given that this project has consumed 39% of the budget for TEN-T rail (although as of 30.06.2011 no project has "suffered" from it) it is desirable that projects of the group of rail TEN-T be compensated from the national budget or other sources of funding if there are TEN-T railway projects sufficiently mature to conclude grant contracts. Thus, the reduction of the budget earmarked for TEN-T railway possibly would not reflect negatively on the progress of the integration of rail transport in TEN-T.

- **In relation to achieving a better balance between the different modes of transport**

The main idea of this sub-goal is to stimulate and develop alternative modes of transport.

Of all the elements of the modification of the OPT, again only the metro project, stage II is applicable for this comparative analysis. First, the refocused budget of the TEN-T rail is intended for multi-modal transport for passengers. Both modes of transport are alternative to road transport, and as such, the main supporting mechanism is OPT (as already analyzed in the section of the balance between modes of transport in this chapter). Second, both types of transport are the so-called "Green transport" and something else – in a more general definition of the modes of transport both are classified as rail. They are set out in the objectives of the OPT, and are supported by relevant strategic documents and horizontal policies. Therefore, pure transfer of budget from one to another mode of transport should not jeopardize the purpose to which both modes of transport contribute. Third, the transfer of 117 million euro (60 million Euro) or 6.5% of the budget of Axis 2 to Axis 1, leads to diverting these funds from road transport to the rail alternative. And given the results of the analysis of the impact of the change on the physical progress (see Figure 12) the positive impact of the modification on the goal is obvious.

- **In relation to the main goal of the OPT - developing a sustainable transport system**

As already stated above, the realization of the goal is directly dependent on the implementation of the two sub-goals of the program. The first sub-goal (integration with the European transport network) - the risk of possible negative impact on achieving a better degree of completion of the TEN-T railway due to reduction of the TEN-T railway budget if railway projects in sufficient maturity for signing grant contracts are present can be neutralized by attracting other funding sources such as the national budget. For this purpose, it is recommended that the MA of OPT should assist the Beneficiary in negotiations with the financial institutions if there is need to attract external funds. The second sub-goal (to achieve a balance between modes) - the impact of the modification of the OPT can be estimated as slightly positive. The evaluators assess **the impact of the change with the goal of the OPT rather as neutral, with positive connotations.**

It should be noted, however, that the objectives of the programme depend not only on the initiated modification. Indeed, only within 6 months of the OPT modification, the climate has had positive results, especially in terms of absorption, and there are also some other positive trends (such as intensive preparation of more projects than the budget of the program can finance, etc.). By itself, however, it will not be enough to ensure that the OP "Transport" will meet all targets, neither in absorption nor in accomplishing the objectives of the program.

The formation of the European transport system has important economic implications. Its implementation allows for carrying out effective governing measures of the EU for the provision of

more rational transport services of the individual business sectors, and for the population. Transport corridors require market-oriented and coordinated operation of all modes of transport under unified transport technology plans and offers. The OPT in fulfilling its goals, can help create a backbone for the further development of competitive and comparative advantages of the country, especially given the geographical location of Bulgaria and the opportunities it provides for the development of transit corridors. Furthermore, given that since 2007 the OPT has been the main source of investment in transport infrastructure, which largely coincides with the period of deep recession and international economic crisis, the programme appears to be one of the anti-crisis tools for the Bulgarian economy, providing jobs for construction and design companies that are among the sectors of the Bulgarian economy most affected by the crisis.

CLOSING REMARKS

The consortium WYG and Partners, as well as the evaluation team wish to thank the Managing Authority for the support and willingness to gather the input information and for their constructive cooperation. We hope that the recommendations of the team will contribute to the successful completion of the OP "Transport" and to the achievement of all the milestones of the programme.